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The French Reciprocity Treaty

For many years the Manufacturers' Record has persistently advocated the importance of reciprocity treaties, and in this issue we are able to present two very striking interviews on the proposed French treaty. Hon. Robert P. Porter, a staunch protectionist, and who for years has been one of the leading protectionist authorities of the country, shows how, from a broad national standpoint, this treaty would prove of great value to our country, while on the other hand Gen. T. C. Catchings of Mississippi, an earnest free-trader, gives his views in favor of this treaty. Thus protectionist and free-trader can meet on this ground and each realize the benefit that would accrue from the ratification of the treaty. The Manufacturers' Record commends these two striking interviews to its readers in all sections.

An Object-Lesson.

One of the phases of cotton manufacturing in the South which seems to be lost sight of by agitators who claim to be working for the benefit of Southern operatives was manifested in a recent supper given by the overseers and other employes of the Piedmont Mills at Piedmont, S. C. Among the 250 persons present was Col. James L. Orr, president and treasurer of the Piedmont Manufacturing Co., who made a speech reviewing the history of the mills, in the course of which he read a list of twenty-eight graduates of the Piedmont Mills who are filling positions as superintendents in various Southern mills. What these and others had done he told the young men present that they would be called upon to do, and added that energy, character and intelligence were all that is needed for them to fill such positions with credit to themselves and their country. The advice was excellent, but this illustration of the harmonious relations of Southern employers and employes is of more importance, and ought not to fail to impress persons whose ignorance of Southern conditions have led them to favor extreme measures intended to cripple Southern enterprise.

Southern Interest in the Merchant Marine.

The interest which the country at large is manifesting in the consideration of the shipping bill now pending in Congress is a very hopeful sign, and encourages the belief that some favorable action may be expected in the near future. The events of the past two years have tended to concentrate public attention upon this problem more than ever before, and have furnished abundant evidence of the disadvantage under which this nation labors because of its lack of merchant shipping. Many of those who formerly questioned the need of a merchant fleet and doubted the advisability of enacting laws designed to encourage such shipping have been convinced of their error, and are now staunch advocates of the legislation that is proposed.

Our war with Spain demonstrated the weakness of our shipping, and our government was forced to buy foreign ships for the carriage of its troops, and the war which England has on its hands now in South Africa still further emphasizes the disadvantages of our complete dependence upon the vessels of other nations for the carriage of our foreign freight. In this case injury is inflicted upon American commerce by the withdrawal of a large number of English ships from freight service for use as transports. What would happen to our foreign trade in the event of a great war between European nations, as, for example, a conflict between England and Germany, could hardly be foretold. English and German vessels now carry the bulk of our foreign freight, and every dollar's worth of our goods would be placed in jeopardy in the event of any such a war—an event not pleasant to contemplate, but one which nevertheless is always within range of possibilities.

Whatever point of view is taken, the necessity for developing the merchant marine of the United States is obvious, and there is no lack of argument or fact with which to prove it. The South has as deep and vital an interest in this matter as any other section of the country, for whatever makes business good or bad elsewhere is felt in similar manner in the South. The commerce and industries of our nation bring every section into such close relations that it becomes necessary to consider the productive and distributing forces of the nation as a whole. The interest of the South in all phases of foreign trade is increasing steadily, and as new industries develop this interest will become even stronger. As a shipper the South should be interested in the effort to create sufficient American tonnage to carry all that the South has to produce for sale abroad. Apart from this, the building of the ships in the South, which will surely become an industry of great importance at no distant time in the future, adds another claim for Southern support of the present movement for the restoration of the merchant marine.

One of the greatest shipyards in the world has been growing gradually at Newport News; the developments which have taken place of late in the Birmingham district are providing the basis upon which a great shipbuilding industry upon the Gulf can be created whenever desired. It is not difficult to look ahead to the establishment of many great shipyards at Southern ports, but without some national policy which shall encourage and protect American shipping there can be little inducement for the establishment of great plants for the building of ships. In commerce and in manufacture the United States acknowledges no rival, and yet with all our supremacy along these lines our weakness as a shipping nation is humiliating. Our nation is like a giant with crippled feet, quick of mind and strong of arm, but in helpless dependence upon others to fetch and carry.

A Word to Planters.

Cotton has reached eight cents a pound throughout the South. Cotton-growers and merchants are enjoying the outward and visible signs of the improvement in the cotton situation, which do not seem to interfere seriously with the enthusiasm of the prophets of an enormous cotton crop who purvey to the necessities of "cotton farmers" of Manchester and Liverpool, who sow not, but who in years past have managed to gather considerable annual crops. In the face of predictions bullish as to quantity but bearish in intent, men who justly stand as authorities in the cotton market are presenting statistics demonstrating the fallibility of imaginings which began five months ago with prophecies of 11,000,000 bales. So important is cotton to American industry and commerce that a survey of the field at this time is particularly interesting. This is given on another page by Col. Alfred B. Shepperson of New York, and it will undoubtedly attract wide attention. The figures presented by conservative men and their deductions therefrom are most gratifying to everybody interested in the welfare of the Southern farmer.

At the same time the Manufacturers' Record must again urge upon all those with whom it comes in touch the necessity for conservative preparations for next year's crop. There have been hints that the good times of this season are leading planters to enlargement of operations next year, which, if carried too far, will bring disappointment and loss. The tomorrow of cotton cannot take heed for the things of itself. Cotton-growers' conventions and even the suggestions of agricultural commissioners cannot control it. The individual planter makes his own cotton tomorrow. He may, under existing circumstances, be tempted to spend all he made this year in providing for a larger crop next year. Let it become generally known, however, that the returns from the crop of 1899

are going entirely into fertilizers and mules for a larger acreage in 1900, and the prices for next fall and winter delivery will be forced down by bear operators. Through such a policy the planter will be disappointed, both as to his yesterday and his tomorrow. The best plan for him is to use as much of the proceeds of this year's crop as possible to place him in an independent position, and to use his capital during the coming season in strengthening his independence, devoting to cotton only so much energy, time and money as may be spared from the work of providing food for him and his family, no matter what his next-door neighbor may do.

The Poor White Boy.

The suggestion in the Manufacturers' Record of January 4 of a strong, united, concentrated and persistent effort in behalf of poor Southern white boys to fit them for the remunerative duties in industrial and agricultural life which naturally belong to them has attracted wide attention. This has been indicated in individual letters and in editorial utterances. Mr. L. L. Gilbert of Montgomery, Ala., secretary of the Alabama Commercial and Industrial Association, sends congratulations on the presentation of the subject in its present form, and writes:

No more vital question faces Southern thinkers today; no work is so fraught with splendid possibilities or gives promise of such practical results. The South is ambitious for industrial development. It has possibilities untold in this direction. It is seeking combinations of capital, inviting money and men, organizing companies and corporations, all to establish manufacturing enterprises, to superintend which, in nine cases out of ten, a practical man, unaccustomed to Southern labor, must be brought from the North or East. Alabama will one day lead all the States of the Union as a manufacturing State. We want factories, thousands of them, to utilize the raw material so varied and so abundant at our doors, but we want Alabama boys, if possible, ready and competent to take charge of and run them. Schools of technology would soon divert some of the ambitious young men of the South from the overcrowded ranks of the professional field to obtain a valuable and technical education in some industrial science. There are scores of plantations in the South today which, if the same amount of brains and energy was expended upon them that is spent upon a mercantile enterprise, would yield four times the results. You will be doing the South a wonderful service if you will continue to emphasize this need and plead for its remedy.

The Nashville American says that the facts brought out by the Manufacturers' Record are apparent to all who closely observe conditions, and adds:

We have commented upon them often, and have urged as a corrective that manual training schools be established in conjunction with our city schools, and once established there they would spread to the country. Practical education is needed in this day and time. Most men must work for their living with their hands. All cannot be thinkers, and as a matter of fact the workers on an average are better paid than the so-called thinkers.

The Mercury of Huntsville, Ala., says:

The white boys of the South surely need

the training suggested, and their country needs it too. There is a disposition among the boys of the present generation to shun manual labor; the average boy wants a profession instead of a workshop, simply because he has not been trained to understand either the uncertainty of the one or the absolute certainty of the other. The common schools may be improved until they reach a degree of excellence equal to the average high school, but that will not answer the purpose. The boys must be taught that an excellent carpenter can do more good in the world than a poor lawyer, and the sooner that doctrine is inculcated in their minds the better for the boys and the communities in which they live.

The West Alabama Breeze of Northport, Ala., says:

The idea of simply an education for a profession or for a clerkship in a store will no longer satisfy the demands which are upon us. Skilled labor is the need of the hour, and while thousands of our white boys languish and pine for employment, the factory, the mine and the shop of the New South must seek in other climes the labor they need. The wealthy men of the South could find no better nor bigger benefaction for our boys than a great industrial school, where there may not only be training of mind, but of muscle as well. Will not some millions be spent right soon this way? The boys and young men of the South should open their eyes to the situation. Numberless doors are open for the earnings of large wages, and will continue to open yet more and more. If they will but put on the garments of knowing-how-to-do they may walk in and be welcomed.

The Journal and Tribune of Knoxville, Tenn., says:

The hope of the South's future lies with the poor boys of the South. The sons of rich men, conceding that they give the same promise, are not numerous enough to rely upon; the relation of the two classes are as 100 to 1. The foundation has been or is being laid for such a development in this Southland in the next quarter of a century as was not dreamed of by even the most sanguine a quarter of a century ago. The poor boys of the South must do the major part of the building.

The News of Charlotte, N. C., says:

The professions are undoubtedly overcrowded in the South, and the young man who is enabled to make a bare pittance as a lawyer would, if he were trained as a machinist or cotton-mill manager, obtain a fine salary, probably be made manager of a large enterprise, and be of more real value to his community than a dozen lawyers. When our young men train themselves for manufacturing as they are now trained for the professions, the foundation of a vast addition to the South's wealth will be laid. But one man cannot bring about this change of sentiment in the South. For generations the professions have been regarded as more honorable than the trades, and it will take many tongues and pens and an active propaganda to uproot the idea. When that is once accomplished there will be a wider field and a bright future for the Southern white boy who has to make his own way in the world.

There is no doubt that an active propaganda must be carried on by many tongues and many pens to bring about a change of sentiment whereby the great mass of Southern boys at school may be led to overcome the notions which have controlled studies of their seniors, and whereby men of the South who have succeeded in the face of tremendous difficulties in amassing fortunes may be induced to unite some of their acquisitions in founding an institution where the special work suggested by the Manufacturers' Record may be carried on. But many pens and many voices may labor in vain, and the propaganda be carried on indefinitely without practical results, unless there be one man qualified and willing to represent the movement and to devote all his energies to keeping the various activities in its favor directed to one point. Certainly the material upon which he may work is not lacking. For example, Prof. L. S. Randolph of the Virginia Polytechnic Institute at Blacksburg, Va., the beneficial

results of which were recently shown in the Manufacturers' Record in some figures bearing upon the occupations of graduates of the institution, writing regarding the needs of the school, says that its equipment and financial condition are entirely inadequate to the demands made upon it, and that an earnest effort is being made to get some assistance. He adds:

We can get nothing from the boys, as the bulk of them have nothing. As a matter of fact, a large number of them, fully one-half, are supported by the institution. Earning the money for their support by firing boilers, waiting in the mess hall, working in the shops, milking cows, working in the creamery; in fact, every position which the students can fill, is filled by them. We are crowded to the utmost in shops, dormitories and laboratories, and must have assistance if we are to continue to handle the present number of students properly, much more the increase.

The gratifying spectacle presented by probably 150 young men at Blacksburg may be observed in other institutions in the South, and it is typical of the spirit which should encourage the prophet of the poor white boys to undertake his difficult task, and which, demonstrated forcibly by him to Southern moneyed men, will undoubtedly bring from them the necessary financial support for his work, and probably inspire more than one man of wealth at the North to a liberality for the assistance of the poor white boy in his effort to prepare himself for his life-struggle equal to that which has been shown for the past thirty years toward the negro.

Is there not among the great millionaires of the North some philanthropist who will build to himself an imperishable monument, whose stones shall be the human lives that have been uplifted and ennobled and made a power for the good of their country, by endowing a great central technical school in the South? Its influence for good would be far greater than a Chicago or a Johns Hopkins University.

How?

The Memphis Commercial-Appeal, which views the subject of the expansion of American trade from a decidedly Southern standpoint, and which has discussed the subject lucidly and sensibly, gives it a novel turn in propounding the following questions:

1. How is the South to be benefited by anti-expansion?
2. What are we to gain by surrendering the Pacific possessions which we have paid for?
3. How can the cotton business be improved by shutting up the Pacific outlet?
4. How can a contraction of our markets raise the price of cotton?

Like others who have studied the question unhampered by sentiment, the Commercial-Appeal holds that the cotton producers of the South are to be benefited by expansion of commerce as much as anybody else. Its questions furnish food for much thought.

Trouble in Texas.

In addition to having its hands more than full of a cumbersome tax bill against which objections are daily increasing, the Texas legislature in special session is likely to be bothered as a result of the operation of the recently-enacted anti-trust law. A dispatch from Austin to the New York Commercial notes the wide range of business undertakings affected by the drastic measure now in effect, and states that orders have been issued by several large manufacturing concerns that they will do no further business in Texas until the law is repealed or

amended, and that some of the insurance companies have already given notice of their intention to withdraw from the State. Such action is likely to bring the evils of radical legislation to the vital attention of the substantial interests of the State which ought to control legislation, and it is hoped may result not only in a modification of laws which place a handicap upon the State in the race of development, but may prevent additions by the present legislature to the burdens already accumulated.

Grounded Upon Cotton.

More than usual attention seems to be given at present by recorders of Northern sentiment to the industrial prosperity of the South. The Daily Financial News of New York holds that the factors which are so rapidly developing the Southern States are increased railway traffic, rapid growth of cotton planting and weaving and the output of pig-iron, beginning of steel-making, larger production of coal, higher prices for cotton and better farming, and it adds:

In coal and iron, lying alongside of each other for hundreds of miles, the South has limitless possibilities for iron and steel. The largest timber reserves of the country are in the South. The mountain country is a region where the finest of fruits can be grown in vast quantities as an export crop, where cattle can be profitably raised in great numbers and dairy operations carried on profitably. The agriculture of the South can be varied and expanded almost without limit. In a word, the Southern States are peculiarly and wonderfully rich in the materials upon which great industries are founded, and is, at the same time, able to sustain a dense population from its own soil. These facts are gradually becoming known and being taken advantage of. The growth of the South will continue.

Particular interest seems to be had in the cotton industry, and the possibility of its disastrous competition with New England. It is refreshing to note in the New England Statist that there has been a decline of apprehension on this score in New England. It gives as the reason the fact that Southern mills turn out a different grade of goods from those generally produced in the North, and that the vastly-increased export business of the country, stimulated by trade interests in the Far East, has worked even more largely in favor of Southern industries than of those of New England. In connection with this view should be read that of Bennett's Weekly of New York. It contends that each section is fulfilling its allotted destiny in accordance with the evolution of the cotton-manufacturing industry in the United States, and it adds:

There are a number of reasons, which need not at this juncture be enumerated, why the manufacturing situation in the South, particularly in the Piedmont section, is especially adapted to the production of cheap medium cotton cloths, and it is a matter for congratulation in the North, as well as the South, that the latter section appears likely to reap in the future a good share of the Asiatic trade in such fabrics.

But there is an equal number of reasons why the cotton-spinning sections of New England are pre-eminently adapted to the manufacture of the high medium and fine cottons which they are making today, Southern New England being little, if at all, behind Oldham in this respect. It is idle, therefore, as well as in bad taste, to construe a perfectly natural distribution of industry as unfriendly competition.

Here are hints for New England and the South. They indicate the new fields of trade opening to the South, the needless alarm of New England about Southern advance and the advantage to both sections in harmonious co-operation for the development of the commerce and industry of the

whole country. At present the South seems to be setting the pace in advocating the broadest policy in this direction. Southern industrial leaders have again and again pronounced in favor of it, and the men who will be the Southern political leaders of the future are found side by side with the wide-awake men of another regime enunciating the old-time Southern theory that this country should become what its capabilities demand that it should be.

The Southern Industrial Convention, permanently organized last October at Huntsville, will meet at Chattanooga, Tenn., on May 8 and will continue in session until all the business brought before it bearing upon the industrial life of the South shall be disposed of. The initial meeting in its conduct and results was a marked departure from so many Southern conventions that have been held ostensibly for material purposes, in that it was free from the taint of party politics. Representative men discussed in a practical way from a standpoint of experience or close observation the influences which are making for the upbuilding of the South. They gave a stamp to the convention, which, maintained, will be effective for the good of the city wherever it may happen to meet in directing the attention of the country to its industrial and commercial opportunities, and at the same time will be one of the potent agencies for increasing the interest of the country in the resources of the South.

The senate of Mississippi has passed a bill carrying an appropriation of \$40,000 for the erection and equipment of a textile school at the Agricultural and Mechanical College. It is believed that the sentiment of the lower house is favorable to the measure. Such an expenditure will be a wise one. In the natural course of events, hastening every day, Mississippi is bound to become a large cotton manufacturer, and it cannot make too great haste in equipping itself with the means to educate its textile directors equal to those which have been found necessary in the older textile centers of the South.

The Daily Bulletin of the Manufacturers' Record, which gives advance information about new enterprises, building contracts, railroad construction, machinery and supplies wanted, has been found a valuable adjunct to manufacturers and the country. Illustration of this is given by the Asphalt Ready Roofing Co., manufacturer of asphalt products, of New York city, which, in a letter to the Manufacturers' Record, writes:

We are pleased to state that we have been following up some business through your Daily Bulletin, and in the last two days we have traced about \$450 worth of business which came from this source alone.

Material for Paper.

The offer of the New Orleans Times-Democrat to give \$500 as its share of a prize to be offered by the newspapers of the country to the inventor who may find a cheap and suitable substitute for wood pulp in the manufacture of paper has brought forth suggestions of cottonwood or sweet gum, bagasse or the refuse from sugar-cane, cottonseed hulls, rice straw and pine straw as the substitute. Against these products of the South the objection has been made that they do not quite reach the market. But the Times-Democrat is urging chemists and inventors to do all in their power to overcome the suggested difficulties.

STRENGTH OF THE COTTON SITUATION.

By Col. Alfred B. Shepperson.

Within the last few weeks the cotton dealers and spinners of Europe have been buying freely in our Southern markets, and the liberal receipts recently are chiefly due to this cause and to the filling of former contracts to ship in January and in February. The Liverpool market today was active at an advance of one-thirty-second of a penny on spot cotton and three-thirty-seconds of a penny on futures, while in New York spot cotton advanced one-eighth of a cent and futures about one-quarter of a cent. The sales of futures here were the largest for some time, being probably 750,000 bales, and our advance on spots and futures was somewhat greater than in Liverpool.

The feature here was the large buying of futures for this crop, and also for the next crop for European account. Spot quotations were advanced to eight and seven-sixteenths cents for middling uplands, being the highest figure of the season and the highest price since September, 1896. Prices in the Southern markets, however, are relatively higher than in New York, so that cotton cannot now be brought here from the South.

The advance was largely due to the final abandonment by many European dealers in cotton of the idea of an immense crop, to which they have tenaciously clung since last August. The efforts of our European friends and their allies in this country to depreciate the value of cotton began in August by the circulation of exaggerated estimates of the size of the crop. The plain and palpable facts respecting actual conditions were ignored or absolutely misrepresented in order to imbue the general public with the idea that the crop would be the largest on record, and that the resulting supply of cotton for the season would be greatly in excess of requirements. This phase of the campaign against cotton, though urged with a persistence worthy of a better cause, has utterly and ignominiously failed. No one now thinks of a "12,000,000 crop" even in his dreams. No man mentions even in the most confidential whisper his belief in 11,000,000 or even 10,500,000. If 10,000,000 is mentioned, it is usually apologetically. All the extravagantly large guesses of last summer and fall, based usually upon nothing but the desire to depreciate the value of the property of the holders and growers of cotton, that the "crop guessers" and others might profit at the expense of the South, have "gone where the woodbine twineth." The plan of campaign has been changed, and figures are now being poured out in profusion to show that the consumption of cotton is going to shrink to conform to the smaller crop, and that after all there will be an abundant supply for the mills and a fairly good surplus at the end of the season.

In a recently-issued circular, the substance of which was cabled from Liverpool on February 2, my good friend, Mr. Thomas Ellison, estimates the consumption by European mills for the three months ending December 31 as the same as the previous year, but thinks their consumption during the remaining nine months of the season will be 300,000 bales less than last season, in consequence of the advance in cotton. If the advance in cotton is going to seriously check the consumption by European mills, would there not have been some evidence of it to December 31? As highly as I esteem Mr. Ellison, I cannot accept his view that

the European mills will consume less cotton than last season. I firmly believe they will consume considerably more. They have greater capacity and are making money, and the voluntary curtailment of a profitable and active business is something entirely out of the ordinary course of business.

In this country there is abundant evidence that the Northern mills will consume about 250,000 and the Southern mills from 200,000 to 250,000 bales more than last season. Their spindles have been increased, and are being worked to their full capacity, many mills North and South running overtime.

Last season 174,000 bales of cotton were exported to Japan from this country. During this season about 200,000 bales have already been shipped, and I quite agree with my Japanese friends that 150,000 more will probably be shipped, making 350,000 bales for the season.

Last season 439,000 bales were shipped to Japan from Bombay, but owing to the serious shortage of the India crop (estimated at over 1,000,000 bales), it is thought that the shipments from Bombay to Japan will be quite inconsiderable this season, and that much of this shortage will be made up by increased purchases of American cotton. My impression is that the European mills will consume fully 150,000 bales of cotton more than last season, and in view of the shortage in the India crop, it will be chiefly of American cotton. In deference to Mr. Ellison's views, however, I will leave the matter of an increase of European consumption out of consideration, but am unwilling to admit of any voluntary decrease.

Some cotton has already been shipped from here to Bombay, and more will follow. Several thousand bales have gone to China. Calling increased consumption of our own mills 450,000 bales, and the increase in shipments to Japan, India and China 200,000 bales, we have in these items alone an addition for this season of 650,000 bales of American cotton to the world's consumption last season of 10,800,000 bales.

I wish to be conservative, but it looks as if about 11,500,000 bales of American cotton would be needed for consumption during the season. In December I estimated the commercial crop as 9,500,000 bales, and regard that a full estimate. This, added to the visible supply of American cotton in the world on 1st September (1,963,000 bales), would give a supply for the season of 11,463,000 bales.

It looks as if there might be a "scramble" ere long for what is left of our crop, and the certainty that at the end of the season the visible supply and the invisible supply (or stocks at the mills) will be smaller than for many years, and so inconsiderable as to keep spot cotton at a good price during the early fall without much regard to the size of the new crop or the course of the futures market.

New York, February 6.

Baltimore Chamber of Commerce.

At the annual meeting of the directors of the Baltimore Chamber of Commerce Mr. J. Hume Smith was re-elected president; Charles C. Macgill, vice-president; L. C. Doll, treasurer, and William F. Wheatley, secretary. Mr. Smith has already been president of the organization for two terms of office.

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THE FRANCO-AMERICAN TREATY INTERPRETED BY HON. ROBERT P. PORTER.

During the recent illness of Commissioner Kasson, who, in conjunction with the French ambassador, M. Jules Cambon, worked out the details of the pending Franco-American reciprocity treaty, the Secretary of State requested Mr. Robert P. Porter, who has been engaged on the solution of the Cuban and other insular tariff problems, temporarily to give the benefit of his skill as a tariff expert to the interpretation of the various schedules of the French reciprocity treaty for the special use of the Senate committee on foreign affairs. This task Mr. Porter has just completed in the most thorough and comprehensive manner, and now that he has finished his work, which is embodied in a set of tables giving the present American duties on goods imported by us from France, the new duties that will prevail should the new treaty be ratified, the present French duties on American products, and the lower duties which the French are offering to give us, Mr. Porter, in giving out for publication some general conclusions arrived at after all this work and study, has seen fit to make the *Manufacturers' Record* his chosen medium for reaching the business public. In view of Mr. Porter's recognized ability as an expert in commercial matters, his communication through the *Manufacturers' Record* to the business public deserves and will command the highest consideration from all who are in favor of that kind of expansion which means wider markets and larger trade. His review is as follows:

Mr. Robert P. Porter's Review.

"It is believed that our exports of manufactures for the fiscal year ending June 30, 1900, will reach \$400,000,000, and that our exports other than agricultural will aggregate for the same period \$500,000,000. Such phenomenal increases in the exportation of commodities which come in direct competition with the products of European mills and factories make it necessary to revise our commercial relations with other nations and secure for American capital and labor a fair degree of protection abroad as well as at home. The present administration came into power declaring that the repeal of the reciprocity arrangements negotiated by that far-seeing republican statesman, James G. Blaine, was a national calamity, and demanding their renewal and extension. Here are the words of the platform:

"Protection and reciprocity are twin measures of republican policy, and go hand in hand. Democratic rule has recklessly struck down both, and both must be re-established."

"In accordance with these declarations the tariff was revised with a view of fully protecting American home industry, and section 4 of that law gave the President power to renew the reciprocity treaties so that the products of American agriculture and industry should be on an equality with the products of the most favored nations in the markets of the world.

"Acting in good faith, President McKinley proceeded to put this section of the Dingley tariff law in force, and the most important result of this action is the French treaty at this moment under consideration by the foreign relations committee of the Senate. There are other treaties of lesser importance completed and before the committee, and yet others in process of completion, but the issue

will be made on the Franco-American treaty. True, it has been attempted in some quarters to join issues and raise a cry against all treaties, and so postpone and ultimately defeat them. This will fail, because the chairman of the committee, Senator Davis, proposes to consider each treaty on its merits, and the French treaty, disentangled from the other treaties, is now under consideration. The strongest opposition to the treaties generally has come from the wool-growers, but that opposition expires by limitation February 10, when I understand the Argentine treaty lapses if not confirmed. As there is no possibility of the Argentine treaty being reached in the foreign relations committee by that time, the most serious and far-reaching opposition is removed.

"A careful and unprejudiced examination of the French treaty shows that it is a fair bargain between the two countries. The French government agrees to admit a large range of American products at the minimum rates of duty, which in many cases means a reduction of 50 and even 60 per cent. The American industries particularly benefited will be those relating to meat, lard and pork products. The fruit interests of Michigan and of California will be large beneficiaries. The numerous producers of cottonseed oil throughout the South and the 45,000 producers of mineral oils in the North and South will be assured for five years of the minimum rates of duty. Oil is our fourth great staple, and cuts a large figure in the balance of trade. And the South and North are alike interested in mineral oil, for, in addition to the great oil interests of West Virginia, Texas is now becoming a large oil producer. The reduction of duty in copper and nickel will add to the \$7,000,000 worth of this mineral we now send to France. Reductions ranging from 25 to 40 per cent. have also been arranged on the woods and furniture of our Northwestern and Southern States. A liberal reduction has been made on American machinery of all kinds, and as these exports are now nearly \$2,000,000, good results should come from this change. While complaints have been made because the negotiator was unable to secure the minimum tariff for American boots and shoes, 'other manufactures of leather' are included in the reduction. This industry will undoubtedly come in for favorable consideration in other treaties. American carriages and wagons, 'cycles and railway cars have been given the minimum rate, together with marble of all kinds, iron and steel, small hardware, many chemicals, hemp, fibers, vegetables, building materials, india-rubber goods and a range of miscellaneous articles too numerous to mention. The merchandise above referred to comprises some of our strongest industries, and large quantities of which are at present exported to France. The list geographically includes the whole country, and has been selected with great skill. The South is especially benefited, as was shown in the issue of the *Manufacturers' Record* of January 25, and in the admirable interviews with Senators McLaurin of South Carolina and Jones of Arkansas.

"In return for this we naturally make concessions. The industries benefited, with two or three exceptions, are saying little about the treaty, but the representatives of the home industries, who imagine they are being injured by reductions of

duty accorded France in return, have been loudly proclaiming their dissatisfaction. They see in this a free-trade plot, and claim for the conspirators the President, the Cabinet and all republican senators who desire to accord the French treaty fair treatment and carry out the provisions of the Dingley bill. It is impossible to weigh these international bargains in an apothecary's scale, or measure their benefits with a two-foot rule. Judged by the ordinary standard of 'give and take,' the French treaty seems to be a fair bargain for all parties concerned. To criticize the President and administration and cry 'free trade' is not fair, because reciprocity was conspicuously incorporated into the republican platform and afterwards made a part of the Dingley tariff law. So far as the French treaty is concerned, the power thus vested in the Executive has been used most sparingly—only in eight cases has the reduction been 20 per cent.—and in no instance to the detriment of American industry and labor. The average ad valorem duty remaining after the several reductions (which apply only to France) are sufficient to fully protect the American producer.

"Unreasonable protection, like all extreme measures, only defeats itself. Reciprocity was as much a part of the Dingley law as the 'free list' or the high duties of the 'glass schedule' or 'woolen schedule' or 'hosiery' and 'knit goods' or 'optical-instrument' schedule. If those who agreed to the Dingley law now decline to carry out its fair and reasonable promises, the country, or especially free-traders, have a perfect right to criticize the rates of the existing tariff; in fact, unreasonable objection to the French treaty only draws fire on the whole fabric of protection and jeopardizes the policy which has developed the country and built up our industry. The demand for just concessions to open the world's markets to American staple products, if refused, may develop into an antagonism that will be more far-reaching and endanger the whole tariff. Home industry has for nearly three years enjoyed the provisions of the Dingley law. Is it not time that provisions for the benefit of our foreign commerce were put in operation? Have we not promised that both the tariff and reciprocity shall be re-established?"

"ROBERT P. PORTER.

"Washington, D. C., February 5."

THE FRENCH TREATY FROM A SOUTHERN STANDPOINT.

Speaking of the origin of and occasion for the pending Franco-American treaty and its importance to the South, Hon. T. C. Catchings of Mississippi, democratic representative in Congress of the greatest cotton-growing district in the South, said:

"The Dingley tariff bill was the most hostile to foreign trade ever enacted at the bidding of the extreme protectionists. So extravagant were some of its rates that the republican members of the Senate finance committee, in reply to remonstrances, said that these high rates were imposed in order that the government might have them to 'trade on' in negotiating the reciprocity treaties provided for in the bill. In other words, they virtually declared that, inasmuch as public opinion among republicans had demanded a provision in the law both for commercial agreements with foreign nations (which the President alone might make), and also for 'reciprocity treaties' by the President and the Senate under congressional approval, they would make certain duties so high that reductions conceded to foreign nations would be reductions mainly in name and not in fact.

"Again, the republican managers of the St. Louis convention in 1896 deemed it necessary, because politic, to pledge the republican party to an enlargement of foreign trade by reciprocity treaties. In compliance with this pledge President McKinley has negotiated several such treaties. So important did he deem this work that it was confided to a new bureau in the State Department, presided over by the Hon. John A. Kasson as special commissioner plenipotentiary. Mr. Kasson is a statesman of great experience, having served long in Congress and in the diplomatic service. He has performed his duties with fidelity, prompted by a conscientious desire to make that kind of fair exchange which is 'no robbery.' As nothing human is perfect, so some of the treaties with the West Indies have been criticised, and that with the Argentine Republic has excited the hostility of the wool and leather interests to such an extent that it will probably not be ratified.

"The French treaty, however, is of more far-reaching importance. It is manifestly an administration measure, the defeat of which would belittle the President

and the State Department in the eyes of foreign nations as well as here at home. And yet there are to be found republican Senators blindly antagonizing it, because, as they say, the administration's policy of reciprocity is giving away their darling idol—high protection. And this in spite of the fact that the administration came into power largely by reason of the reciprocity policy to which the republican party pledged itself in its platform, promising in unequivocal terms the enlargement of the foreign markets for American products. To what extent this opposition on the part of certain republican Senators may be carried cannot now be estimated. My only object in referring to it is to emphasize the fact that Southern Senators are patriotically giving the administration that support in behalf of this measure which good faith to the country, as well as partisan consistency, should require of every republican Senator.

"It is a good day for the South, and worthy of its best traditions, when its representatives in Washington thus uphold a liberal commercial policy inaugurated by a republican President, instead of exhibiting the narrow spirit which would act upon the theory that 'no good thing can come out of Nazareth.'

"What can be thought of republican statesmen who, on the other hand, now repent of their pledges for reciprocity—pledges made, it seems, as a mere vote-getting expedient—and are found antagonizing their own President in his endeavors to carry out the policy for which the people voted so unanimously in 1896? I may say they voted unanimously for it, because the democratic party was fully committed to measures antagonistic to the hidebound policy of excluding from our markets such foreign commodities as might interfere with monopolies created by republican protective duties so laid as to be practically prohibitive. Southern Senators who are supporting the reciprocity treaty are absolutely consistent in carrying out in the only way possible the South's aspiration for freer trade and for a larger interchange of American products with those of foreign countries.

A Hint to Republican Senators.

"It is true the South would suffer in various ways from the defeat of the

French treaty, mainly, as has already been pointed out by Senator Jones of Arkansas, through the injury that would result to the producers of cottonseed, and to the rapidly-growing commercial and industrial interests based upon that product, because France is today the largest foreign buyer of cottonseed oil. But the loss which the South would sustain through any serious diminution of the farmers' profits, due to a fall in the price of cottonseed (which would follow the curtailment of the demand for cottonseed products), would react disastrously on the people of the North and Northwest, because for their food products, machinery and other manufactured articles the South has always been and is today the very best market. Hence it would be a short-sighted policy on the part of Northern Senators to fail to consider the merits of this measure from a Southern point of view, leaving out of the calculation the benefits which their own constituents will derive from it.

How It Affects the Negroes.

"But there is another view of this matter which in common consistency ought to be considered by republican Senators, and that is, that the negroes of the South, who, as individuals, are small producers of cotton, but who are collectively the cultivators of a very large acreage, will be the largest losers should the treaty fail of ratification. As a rule, the cotton itself raised by them is turned over at the ginhouse to the country merchants in payment for the necessities of life which have been advanced to them as needed during the working year; but the seed is left to them to be disposed of in their own sweet way for cash. It is from this source that they derive whatever little 'spending money' they have at the end of the year. Now, if the black man and his interests are still deemed worthy of consideration at the hands of republican statesmen, those of them who oppose the French treaty have a poor way of showing it.

"It will thus be seen that no greater blow could be struck at the black man, nor one which he would feel or resent more keenly, than to curtail the demand for cottonseed, and consequently to lower its price, by crippling the trade in cottonseed oil to the extent of \$4,000,000—a result which would certainly follow the defeat by republican Senators of the Franco-American treaty negotiated by a republican President."

Speaking of the business relations between the whites and blacks of the South, General Catchings here parenthetically remarked how gratifying it was to him to observe that thoughtful Northern men in the House of Representatives are coming to understand the serious conditions surrounding the Southern people by reason of such a large negro population, and to admit that the Southern people are meeting the difficulties of that situation in fairness and good faith as best they can.

The Cottonseed Interest.

Coming back to the cottonseed interest and its significance in the light of this treaty, General Catchings went on to say:

"The cottonseed-oil market brings money directly or indirectly into the pockets of all classes in the cotton States, first to the small cotton-growers, the majority of whom are black, then to the merchants, wholesale and retail, to the mill-owners and the employees who work in the mills, while at the North it is profitable to the oil refiners and the vast number of people employed in transforming raw oil into its various products, such as cottonseed oil, soaps, etc. The value of the cottonseed oil imported into France is

now about \$4,000,000, consequently I may repeat that the cottonseed interest would be disastrously affected if the consumption of cottonseed oil in that country should suddenly cease. The producers of this commodity, as well as those who raise the seed from which the oil is extracted, will be interested in knowing that for two years past strenuous exertions have been made in France to so increase the duty on cottonseed oil that it could not be imported into that country with profit to American manufacturers.

French Opposition.

"The commercial agreement now in force between France and the United States, which the President made under the authority of a provision in the Dingley bill, was stubbornly antagonized there all through the period of its negotiation, and a persistent effort was continuously being made to increase the duty on cottonseed oil. Our government remonstrated against such adverse action through legislation on the part of the French Chambers upon a subject then under diplomatic negotiation. Through this remonstrance the French ministry was enabled to postpone unfriendly action. The same pressure for higher duties has been repeated during the negotiation of the present treaty, and the hostility of rival interests in France to American cottonseed oil is now endangering the ratification of this treaty there. I am sure that the rejection of the treaty by the Senate of the United States would be a deathblow to American cottonseed oil in France, for the failure of the treaty would inevitably be followed by an increase of the French duty on that commodity for the avowed purpose of prohibiting its sale in that country. Hence it goes without saying that every cottonseed producer, large and small, would suffer from the loss that would come to this trade from the loss of the French market. The wiping out of business now amounting annually to \$4,000,000 would correspondingly slacken the demand and cut down the price for the farmers' cottonseed. It is therefore manifestly of the utmost importance that this fact should be thoroughly understood through the South. This is a matter of far-reaching consequences, affecting, as it does, both merchant and farmer, because the prosperity of the merchant is dependent entirely upon that of the farmer in most sections of the South.

"This cottonseed interest may indeed be considered one of the great resources of the South. And it is still in the infancy of its development. The increase in cash yield of cottonseed from \$10,000,000 in 1893 to over \$15,000,000 in 1899 shows a phenomenal growth of the industry and its vital importance to the South. The uses of cottonseed oil have multiplied from year to year until at the present time it enters into the manufacture of a long list of useful and valuable articles of commerce.

Not a Monopoly.

"It is not true, as some suppose, that this great product is all manipulated by a single corporation. On the contrary, independent mills abound in the South. There cannot be a monopoly in the crushing of cottonseed any more than in the grinding of corn or wheat. Every corporation and every individual who buys cottonseed and converts it into cottonseed oil and pushes it into the markets of the world is benefiting the small farmer who grows the cottonseed. Every man and every corporation buys as cheaply as possible and sells at as high a price as is obtainable. That is an inevitable law of trade. The mutuality of the interests of capital and labor are in this instance sin-

gularly illustrated. It was a wise saying of Benjamin Harrison that if capital received more than a fair share of the joint product of labor and capital, it would be a fact greatly to be deplored; but the remedy did not lie in destroying the manufacturing interests of the country, and thereby utterly depriving labor of all the benefits it might receive from these. Upon the same principle it may be urged that in any conflict of interest that may exist or hereafter arise between those

who buy cottonseed and those who have it for sale, the extension of the final market for the finished product is a matter of equal importance to both, and outweighs any temporary dispute as to what ought to be paid for the raw material. For the producers of raw material and those who manufacture it to engage in any serious antagonism would be like a traveler burning down the only hotel in a town because he was dissatisfied with the room assigned to him."

carriers what is, in effect, a right of appeal to the courts from the decision of the commission. In effect these powers make the commission a court of original jurisdiction to fix not only the rights of carriers and the public, but also the relative rights of carriers and the relative rights of various portions of the public—a court whose judgments will be of the most far-reaching character, and will affect many interests which may not have been heard. Powers so delicate and extensive should be conferred with the greatest hesitation upon the most carefully-constituted court in the land, but the proposition is to confer them upon a tribunal which seems to be utterly lacking in every element calculated to give it a judicial character.

The commission serves in strikingly inconsistent capacities. Under these amendments it would be executive, legislative and judicial. It has power to see to the execution of the interstate commerce law in all its details, and thus appears in the role of detective. On its own motion it can inaugurate complaints, thus appearing as a plaintiff, and also as the plaintiff's attorney. It can then proceed as a court to hear the very complaints which it may have stirred up, through its work as detective, preferred by itself as plaintiff and attended to by itself as attorney. It is preposterous to propose that a tribunal of this character shall be permitted to render judgments affecting the most vital interests of the country, and that these judgments may go into effect without resorting to any court for a judicial determination of the rights involved. Surely if such powers are to be exercised at all, they should be by a court constituted as carefully as other courts, and entirely relieved and removed from these other functions which are so thoroughly incompatible with the development and preservation of that impartiality which should always be a court's leading characteristic.

There are other serious objections to this measure, but the ones indicated are fundamental, and in the absence of the very strongest necessity for drastic legislation, nothing approaching them should be considered. Nothing of the sort was deemed necessary, or even remotely advisable, when the present act was passed in 1887, after the most thorough and extended investigation, and the traffic conditions were admittedly worse than they are today. Indeed, the present law seems ample to cope with every real difficulty in the traffic situation of today, with the possible exception of secret rebates to favored shippers, and it is significant that this measure, while possibly in some ways facilitating the prosecution of the carriers for such illegal and injurious concessions, on the whole really seems calculated to encourage them by diminishing instead of increasing the prohibitions against shippers who solicit and enjoy them.

Of Interest to Investors.

In the advertising columns will be found a description of a tract of land which is offered for sale. The property is located in the iron-manufacturing district of Southwest Virginia, and is about ten miles from Wytheville and but five miles from the Norfolk & Western Railroad. It contains deposits of iron ore, and a portion of it is timbered with pine, oak and other woods, the oak being especially suited for tanning purposes. The tract is also well adapted for raising live-stock. It contains nearly 15,000 acres. The owners will be pleased to correspond with timber buyers and others interested, and will furnish every facility for obtaining information regarding it.

MORE EMPLOYEES NEEDED.

Industries at Anniston Enlarging Their Operations.

[Special Cor. Manufacturers' Record.]
Anniston, Ala., February 5.

The Central Foundry Co., which two weeks ago let to T. L. Houser & Co. contracts for erecting some of the additional buildings necessary to double the size and capacity of its pipe works here, has awarded contracts for the erection of the remaining buildings to the same firm. The buildings will be of brick and wood, with steel roofs, and are to be completed in sixty days. The main building will be 100x500 feet, and there will be six or eight others of proportionate size. The capacity of the plant will be increased from twenty to forty tons of pipe daily, and the number of employes from 200 to 400. The Central Foundry Co. is also greatly enlarging its pipe shops at Bessemer and Gadsden. Speaking of the policy of the company, Secretary Gerard Schumacher said: "The enlargement of our plants here and at several other places in this section is not caused by any present or expected great demand for soil pipe. Far from it. We are merely consolidating our many plants into few, in order to reduce operating expenses, it being much cheaper to make pipe forty or fifty tons at a place than to have three times as many places and each making ten, fifteen or twenty tons. When our company was organized some months ago we purchased thirty-five different plants in the East, South and West, and are consolidating the thirty-five into ten at the best and most advantageous points. Our six plants in the West will be converted into two; all our plants in the East will be converted into four, and we will have four in the South. The equipment of the Ahrens & Ott plant at Louisville will be added to the one here; two plants will be added to the one at Bessemer, and one to the one at Gadsden. We regard our Anniston plant as one of the best and most valuable we have. Our total output will not be increased by the changes and consolidations, but will remain about as before."

The car-wheel foundry of the Southern Car & Foundry Co., which has been idle for several years, and which is now the only idle department of the big plant, is being overhauled and repaired, and will be put in operation at once. About 150 to 200 men will be given employment, and these, added to the 700 or 800 already employed in other various departments, will give a grand total of 900 or 1000 men on the pay-roll.

The plant of the United States Cast Iron Pipe & Foundry Co., which has been shut down since before Christmas in order that needed repairs might be made, resumed operations today with full force and in every department. About 600 men are employed.

Unforeseen delays will prevent the Jennifer Furnace Co. from lighting the fires in its iron furnace until the latter part of the week.

Iron-ore-mine operators in Alexandria valley are arranging to double the output from that section in the next few months.

L. H. Kaplan, R. Franklin and associates have ordered machinery and will establish a factory here for the manufacture of cotton mattresses. Twenty-five or thirty men will be employed.

The rolling-mill department of the Southern Car & Foundry Co. is filling an order for several thousand steel car axles. The first axles were turned out last week, and were the first steel axles ever made in Alabama. The steel is an Alabama product, too, being made by the Alabama Steel & Shipbuilding Co. at Ensley.

INTERSTATE COMMERCE COMMISSION'S DEMANDS AND THEIR DANGEROUS POSSIBILITIES.

The interstate commerce commission has for several years engaged actively in various directions in the business of attempting to get from Congress a formidable increase of power. Its present demands take shape in Senate bill 1439, which the commission has prepared and has had introduced by Senator Cullom. These demands are supported by the commission's thirteenth annual report, which is largely devoted to an argument for more power.

The commission in effect claims that the present law is practically useless, and that the proposed amendments are not radical, but quite conservative. It is pertinent to inquire what is the present law and what are the proposed amendments.

The present law prohibits unreasonable rates, unjust discriminations between persons at the same locality and undue preferences between different localities or different classes of freight; gives the commission the power on investigation to order carriers to cease and desist from charging rates which are unreasonable or unjustly discriminatory or unduly preferential, and makes it the duty of the courts to enforce the commission's lawful orders. These powers would seem to be quite ample.

On various occasions, however, the commission has made orders prohibiting the continuance of rate adjustments, which it declared to be unreasonable or unjustly discriminatory or unduly preferential, and the courts have declined to enforce those orders, because it developed that the rate adjustments in question were the natural outcome of competitive conditions beyond the control of the particular carriers, and that the rates, instead of being the cause of the apparent discriminations, were simply the result of unavoidable natural and commercial influences. The reasoning in the opinions of the courts in these cases seems decidedly stronger and more practical than the reasoning of the commission.

Again, the commission has made orders not only prohibiting practices which it regarded as violations of the act, but assuming to dictate the precise things which the carriers should do for the future. The courts have held that the commission did not have this affirmative power, and have declined to enforce such orders. And here again the reasoning of the court is more to be commended than the reasoning of the commission.

The commission in effect claims that these decisions have deprived it of all power, but the facts do not bear out the claim, and no reason is perceived why the present law does not afford substantial protection against all rates which are really improper. The present law proceeds on the eminently salutary principle that until the government takes possession of the railroads it ought to permit them to be controlled by their owners,

while at the same time guarding against injurious practices.

The proposed amendments are very sweeping. They propose an ironclad long and short haul rule, under which a less charge can never be made for the longer distance except by permission of the commission, although the commission in the past has denied the propriety of making less long-distance charges, required by unavoidable competition in cases where the courts have afterwards shown with unanswerable argument that the less charges were not only lawful, but highly beneficial to the public. They propose that the commission shall, within a year and three months, make and put into operation a uniform classification, to apply throughout the Union. On account of the widely differing nature of the traffic in the various sections of this country, such a task is well-nigh impracticable, and even if accomplished in the best possible manner it would, instead of simplifying the situation, no doubt cause great confusion on account of necessarily radical departures from well-established and well understood local classifications. Moreover, the commission's apparent inability in many cases in the past to appreciate practical conditions in traffic matters affords no ground for believing that it can cope with such a difficult if not hopeless undertaking, and makes it worthy of the most serious consideration whether it should be vested with unqualified power to precipitate a hastily-prepared uniform classification.

The climax is reached, however, in the proposition to give the commission power to fix both maximum and minimum rates for all the carriers in the country, and to prescribe just how much difference there should be between the rates of different localities, thus vesting in the commission the authority to say precisely what advantage one locality shall have over a competing locality, instead of leaving those matters to be settled, as they are now, according to the natural laws of commerce. If two points are on the same railroad, the present law prevents any improper discrimination between them. If on different railroads each point can depend upon the active co-operation of its railroad in giving it the fullest benefit of the markets of the country. It would be hard, therefore, to exaggerate the danger incident to substituting for this natural process, whereby each locality, through its own advantages and enterprise, gets substantially what it is entitled to, a process whereby the interstate commerce commission could adjudge just how much advantage every locality shall have with respect to every other, and the comparative prosperity each place shall enjoy.

Coupled with these startling powers are provisions which make the orders of the commission effective without the necessity of resorting to the courts for their enforcement, but which give the

J. Baxter Allen is mining iron ore on the rear part of his residence lot on South Wilmer street.

A large force of men have begun mining iron ore at the foot of Boyer Hill in South Anniston.

The Pratt & Yates Bag Co. received an order a few days ago from one concern for 100,000 flour bags.

The Hercules Soil Pipe Foundry has added four new "floors," and is otherwise increasing its capacity and the number of men employed.

J. G. Adams & Co. of Anniston have purchased the iron mines of J. J. Tolleson at Iron City, and will operate them extensively.

ORDERS HAVE INCREASED.

Strong Conditions in the Birmingham Iron Market.

[Special Cor. Manufacturers' Record.]
Birmingham, Ala., February 6.

The orders for iron that were limited to actual necessities for present delivery have been increased in amount, and the buyers are taking the iron at current market. In the new business that has come were some round-lot orders, notably two for 5000 tons each, and sprinkled in were several for 1000 tons each. One interest reports the week's business as the best since last fall. There have been rumors of concessions on prices, but there appears to be no substantial foundation for them for the first half of the year. Quotations are therefore repeated on the basis of \$17.50 for No. 2 foundry, with the usual difference of \$1 per ton for each grade. There is a belief that for the last half of 1900 delivery there have been concessions of twenty-five cents per ton in certain cases. It is not improbable, as buyers are not partial to these long deliveries, and won't take them except on compulsion or as inducements are offered. For present and nearby deliveries the mills are burdened with applications to hurry shipments and to anticipate deliveries. The furnaces have no stock to draw upon in the emergency. Besides that, some of the furnace interests themselves find as delivery day approaches that on some grades they are running short. To supply the deficiency, as one stated, it makes life burdensome.

There is a lively inquiry from several foreign agencies, showing the growing scarcity of stocks and the nervousness of buyers over the fact that the probability is great that they must come to America for iron. Bids have been frequent of late, but save in a few cases buyers and sellers were apart and no business resulted. Room has been taken of late for several thousand tons, and the daily press has heralded the fact as evidence of a revival of the export trade. But the truth is that the business was placed some time back, and in some cases the price was made in New York.

The steel mill is improving in efficiency right along, and each day since it was started the amount of iron melted has increased over the preceding week. The rolling mills never in their history enjoyed the amount of business that continues to come to them. Radical improvements and additions, adding both to capacity and efficiency, have been practically determined upon for months. The executive committee of the Republic Iron & Steel Co. is due here this week to formally inspect, approve the plans and formally authorize them to be carried out. When completed the mill will be in a position to snap its fingers at competition. The Dimmick Pipe Works at North Birmingham is installing its machinery, and will be ready to make pipe some time in March. The Birmingham Machine &

Foundry Co. has risen like a Phoenix from its ashes, and is not afraid now to tackle any business that offers. All of our minor industries are crowded with orders, and some of them are for the time being declining additional business. Some are running night and day. The demand for machinery continues unabated. In coal the domestic demand has been beyond capacity to supply. Now Mexico is applying for a large amount of coal. The large plants completed and to be completed will largely add to demand, while a thousand new coke ovens will soon be crying for coal. We are but on the threshold of the demand that will grow with each succeeding year.

J. M. K.

Eastern Iron Markets.

[Special Cor. Manufacturers' Record.]

Philadelphia, Pa., February 6.

A number of interesting developments has appeared on the surface within the past few days. More iron is wanted, but most buyers are rather particular about what they are expected to pay. Only a moderate amount of business has been done, but there has been a great deal of inquiry as to prices, dates of delivery, etc. The development of the past few days, which is of greatest interest to the trade, is the large amount of inquiry that has been made. It looks as though large and small consumers were getting ready to buy. There is hardly the sign of a change in quotations. The impression is gaining ground that some large buyers of different kinds of pig-iron and of billets are holding off and seesawing on the question of price. Billets are quoted at \$37. The merchant-bar mills are not booking much new business, but it is expected that from this out there will be more done, as the association fixed prices at 2.20. We have begun to sell more sheet iron; No. 10, 2.75; No. 28, 3.35. There is also a good volume of business in plates in sight, and one-quarter-inch plates are to be had at 2.40; shell, 2.50; flange, 2.80; firebox, 3.10. There is a good deal of business for structural mills in sight. Angles are 2.40; tees, 2.45. There is some business in steel rails, but the developments of the coming week or two will be of special interest. Quotations are supposed to be \$35 to \$36. Our machinery manufacturers are picking up more or less business for general electric-light work. Large additions are to be made to shipbuilding facilities. Interest has been intensified in the Gloucester shipbuilding plant, across the river, by the visit last week of Mr. Frick from Pittsburgh, accompanied by some capitalists. They are credited with the purpose of establishing an immense shipyard at that point, and of an intention to purchase the Maryland steel plant at Sparrow's Point. The present outlook for machinery has brightened up by the ordering of a great deal of work in the way of machine tools, material for automobile concerns, and also material for large manufacturing plants. This spirit of inquiry is indicative of an earlier rush of orders than usual for machinery. It was thought a while ago that the higher prices which have been named would reduce the demand for mechanical appliances, but it has scarcely made any impression. The car-builders will be the heaviest buyers this season, as nearly all of them have made additions to their plants. It is given out on the best authority that all the big trunk lines will soon be in the market for more rolling stock. An authority on the subject of locomotives says that a new locomotive works is likely to be built somewhere in the East on a scale of great magnitude, but whether this is a mere rumor it is impossible to say.

PRESSED-STEEL CARS.

A Mighty Element in the Industrial Revival.

The enormous extension of the use of steel in this country is well explained in the following dispatch to the New York Sun from Pittsburgh, Pa.:

"The scarcity of steel which has been felt in many industries is due largely to one single industry that has sprung up within the last three or four years. Had it not been for the enormous quantity of steel taken up by the pressed-steel-car industry, shipbuilders, building contractors, roofers, nail manufacturers and railroad builders would have found the supply easier and the cost of the materials not so great as it is. For more than a year the Pressed Steel Car Co. has been securing from the Carnegie Steel Co. 1000 tons of steel every workday, and at present 400,000 tons of steel a year, or 1200 tons a day, is being turned into cars. The Carnegie Company has been asked to furnish 1600 tons of steel plates every day. Under the conditions that prevailed a few years ago this 400,000 tons of steel would have gone into the general market to supply the regular industries. It is therefore only natural that with this enormous quantity suddenly withdrawn from the general market the established industries should suffer. It is correct to say that this tonnage has been suddenly withdrawn, for it must be remembered that until a year or so ago the steel mills of the country, with only one or two exceptions, were practically in the same condition, as regards equipment, that prevailed in the hard times. Very few extensions to plants were made, and not much improved machinery was put into the mills in those days, consequently the sudden access of prosperity found the steel manufacturers ill-prepared to supply the market.

"It is interesting to follow the pressed-steel-cartonnage of material into the various industries to which it would have fallen if the new car had remained uninvented. Take the matter of steel-construction buildings in New York alone. To build the Waldorf-Astoria and annex, 10,000 tons of structural steel was required. Estimating the car company's consumption at 1200 tons a day, that company uses in eight and one-third days steel sufficient to erect another frame like the steel interior of the Waldorf-Astoria. At the rate of 400,000 tons a year forty buildings like the Waldorf-Astoria could be built with the steel now used in the steel-car industry. Four thousand tons of steel entered into the construction of the Hotel Savoy; the American Tract Society building used up 3500 tons of steel girders and beams and channels and angles; in the Hotel Netherland 5000 tons of steel supplied the frame, and the steel work in the Holland House weighs 3000 tons. Anyone can figure out for himself from these figures the varying sizes of fireproof buildings which the daily tonnage of the steel-car industry would furnish if the plates used in making cars were manufactured instead into structural shapes. The latest figures obtainable show that last year 125,000 tons of structural steel was used in erecting buildings in New York, thus demonstrating that the annual quantity of steel, 400,000 tons, that goes into steel cars would furnish more than three years' supply of steel building material for New York at last year's rate of construction. It is not to be wondered at, then, that building material has lately been scarce.

"The Sixth street suspension bridge, connecting Pittsburgh and Allegheny, contains 4500 tons of steel. The building of steel cars requires, therefore, metal suffi-

cient to build eighty-nine bridges like that at Sixth street. That explains why bridge material is still scarce. Taking the length of the railroad bridges that cross rivers, creeks and ravines, it is found that the average single-track railroad bridge is of 200 feet span and weighs about a ton to the running foot. That the railroads have found it difficult in the last year or two to replace worn and old-style bridges with new ones is not, therefore, to be wondered at, when one considers that 2000 bridges, weighing 200 tons each, could be built each year with the steel that is used for the new cars.

"Were it not for the demands of freight traffic the machinery that is in daily use turning out 1200 tons of steel plates to be pressed into shapes for cars could be utilized in making plates to form the hulls of ocean-going steamers. To build a steamer 500 feet long, 50 feet beam and 50 feet depth, about 3000 tons of steel in the form of hull plates and structural shapes is required, and therefore 133½ steamers of the size indicated could be built with the 400,000 tons that the car industry consumes at present each year.

"During the hard times that closed with the beginning of President McKinley's term the extension of existing railroads practically ceased, and even the most necessary repairs to tracks and bridges were made reluctantly. When, therefore, the railroads began to enjoy their share of prosperity and freight traffic was resumed, new rails were needed and old bridges had to be repaired and replaced. The need was urgent, but the railroads were confronted with the fact that a new industry had arisen, dependent upon the railroads themselves for its prosperity, and yet depriving them of the material they needed for extension and repairs. When railroad officials asked for quick delivery of rails and bridge materials they learned that from 800 to 1200 tons of steel was daily diverted from accustomed channels of consumption into the new car industry. The favorite rail weighs ninety pounds of steel to the yard. One thousand tons of rail is equal to fourteen miles of rail or seven miles of track, and therefore the pressed-steel-car industry uses up enough metal every day to make more than seven miles, and enough every year to make 2800 miles of track."

Deal for Maryland Steel Plant Reported.

Persistent reports state that Henry C. Frick of Pittsburgh, Pa., is now negotiating for the purchase of the plant of the Maryland Steel Co. at Sparrow's Point, near Baltimore, the plan being to make at that point ship plates for the New York Shipbuilding Co. at Camden, N. J., and to continue the production of steel rails, chiefly for export. It is intimated that \$7,500,000 will be the price of the Maryland plant, and that \$6,000,000 will be expended to improve and increase the capacity from 1000 to 2000 tons of pig-iron daily, with proportionate increase in the rail and ship plates departments. The Mellon family, bankers of Pittsburgh, are reported to be interested in the negotiations, which have not yet, it is said, been carried to a conclusion.

Wrought By a Club.

At the last meeting of the Commercial Club of Birmingham, Ala., Chairman W. M. Malone of the manufacturing committee reported that during the past six years the club has succeeded in locating at Birmingham a car-wheel manufacturing company, snuff and tobacco company, fertilizer company, cottonseed-oil mill, shirt and pants factory, bolt and metal works, pipe works, pipe and casting company, representing an aggregate capital

of nearly \$750,000 and employing 735 people, for which the whole amount of bonuses given was \$4900.

SHIPYARDS AND LABOR.

Illustration of the Benefit of the Former to the Latter.

The benefit of shipyards to skilled and unskilled labor is shown by statistics recently compiled which indicate the large number of men required to complete a warship or merchant vessel. The statistics were based upon the plan followed out by the Newport News Shipbuilding & Dry-Dock Co. In constructing the battleship Kentucky 737 men were required, and the period of employment of each averaged three years. The force was divided as follows:

Blacksmiths.....	43
Boilermakers.....	52
Drillers.....	28
Electricians.....	4
Fitters.....	128
Joiners.....	25
Common laborers.....	80
Machinists.....	63
Outfitters.....	32
Painters.....	20
Patternmakers.....	3
Plumbers.....	15
Riggers.....	5
Riveters.....	147
Ship carpenters.....	85
Coppersmiths.....	7

The merchant vessel El Sud, recently built by the same company, furnished employment for twenty-six blacksmiths, thirty-one boilermakers, seventeen drillers, two electricians, seventy-seven fitters, fifteen joiners, forty-eight common laborers, thirty-eight machinists, nineteen outfitters, twelve painters, two patternmakers, nine plumbers, three riggers, eighty-eight riveters, fifty-one ship carpenters and four coppersmiths for a period of one year.

These figures do not include the men required to prepare the material, but are confined to those working upon the vessels after the keels were laid. An idea of the wages paid out in the construction of such a vessel as El Sud can be gained when it is stated that the scale ranges from \$18 a week for patternmakers, painters and coppersmiths to \$8 a week for laborers. The vessel referred to is one of four which have recently been completed for the Morgan Line, and which are of the average size of American coastwise steamships. Such ships as are to be constructed for the Pacific mail service will be nearly double the size of El Sud, and require a proportionately larger force of men.

The statistics referred to are to be brought to the attention of Congress in connection with the agitation for American ships for American trade. As the South offers excellent facilities for the establishment of a number of additional shipyards, the matter is of especial interest to its laboring population.

To Use Electric Power.

It is announced by the Times of Richmond, Va., that the Richmond Locomotive and Machine Works, the William R. Trigg Shipbuilding Co. and the American Tobacco Co. have decided upon the use of electricity as a motive power, and that the Virginia-Carolina Chemical Co. is investigating the matter. The William R. Trigg Company has let contracts for several thousand dollars' worth of new shipbuilding machinery, all of which is to be motor-driven. The plan of the company is to run its large machine shops by various electrical motors connected to the machines or belted to the shafting, and to drive all isolated machinery in its yard by direct-connected motors, and probably to drill its steel plates by the same means.

It is estimated that the saving in the loss of transmission by belts and shafting will probably approach 25 per cent.

Legislation and Development.

[Florida Times-Union and Citizen.]

Thirty years ago the South offered prizes as rich to capital and labor as the West; why has the West so far outstripped us in the race of progress and development? Because our legislative policies were then so uncertain, capricious and corrupt that capital did not feel safe within our borders, and many of our own people despaired. Therefore Chicago has outstripped New Orleans; the West has a thousand new cities where ours have barely held their own, and immigration has fertilized all the waste places on the other side of the Mississippi. We have our government in our own hands now. Is it not true that the feeling of hostility to capital is no longer accepted as devotion to our section and people?

We believe this is true. If so, that Southern State which soonest makes this apparent will outstrip her sisters as the West left us behind. Why should not Florida be that State? The New York Commercial, which was our consistent friend in the days when we most needed help, now says:

"A Southern paper recently said: 'The time may come in Georgia when every man with money invested there will not shudder and grow cross-eyed whenever the legislature meets.' The Richmond Times moves to make this sentiment unanimous and incorporate the wish for the benefit of every Southern State. There is no question but that material interests South have been tremendously handicapped by adverse legislation. It is as our Richmond contemporary observes, a most expensive thing for any State to get the reputation of being hostile to enterprise. Of course, the people have rights, and rights which rich corporations should be made to respect, but it will not do for the South to hold out one hand beckoning investors, while it grasps in the other a club with which to destroy capital."

These sentiments are indorsed by the Manufacturers' Record, our loyal and faithful friend, which quotes from the Staunton (Va.) News a long editorial on these lines, from which we take the following extract:

"What is the opportunity of the hour? First of all, self-help, co-operation in using our surplus money in the establishment of industries that will create pay-rolls and make home markets. It is the weekly pay-roll that maintains and perpetuates what is most conducive to the welfare of every class and calling. It is honest work for all that shuts up the devil's workshop. But in this day of enormous operations, and in these States of immeasurable resources, we want outside capital added to what we can raise ourselves. And in this era of insane animosity toward capital—an animosity which seems to have become epidemic in so many States—the crowning opportunity of this generation of men is within reach right here in the Virginias by the intelligent encouragement of capital, which is proverbially the most timid of things preyed upon."

Is capital our enemy? Is any capitalist who has made investments in Florida the enemy of her people? Let those who declaim against corporations and trusts and attack investments by the threat of adverse legislation point to the dollar and the man and prove his charge by citation of act and time and place. Wrong may be shown on both sides, as may be done in the cases of any two neighbors whose farms adjoin—this is human nature, but

that fact does not prove that the interests of the two parties are antagonistic, or that one would willingly hurt the other.

Have we reached this conclusion? Having failed to hurt the other more than ourselves for twenty years, why not try good-will for a time? We make the law, and the law is the common arbiter. Would it not be well to leave the settlement of our differences to the courts and pull together now? If we have reached this conclusion, let us publish the fact and conduct ourselves accordingly, for we accept in full spirit and letter this statement of our Staunton contemporary:

"The spectacle of such a people as the Virginians being led around by the nose at the hands of self-seeking politicians—nine of every ten of them intent only upon currying favor with the unthinking majority—would at any time be lamentable, but on this day of opportunity it would be more than that—it would be a suicidal sin."

An Offer for Factories.

In a letter to the Manufacturers' Record Mr. Thomas J. Mangham of Ruston, La., who commenced more than ten years ago agitating the feasibility of locating cotton mills in the midst of the cotton fields, writes that, in response to a suggestion made by him in the eighties, he received two propositions to locate factories where he then lived if he would subscribe the necessary amount of land upon which to erect them. He did not own any land at the place, and could not prevail upon those who did to accept the proposition. He says that he is now in a position at a still more desirable location to readily accept any such proposition. The place has two railroads crossing each other, is in a healthy agricultural country, and has a constant supply of water for generating steam.

Offer from Arcadia.

In a letter to the Manufacturers' Record Mr. George W. Robinson, secretary of the Business Men's Association of Arcadia, La., writes that to any company contemplating building a cotton mill Arcadia is ready to offer as inducements exemption from town taxes, a site of forty acres of land and strong co-operation of the citizens of the parish and town. He adds: "Arcadia is situated on the V. S. & P. Railroad, in Northern Louisiana, and on the dividing ground between Shreveport and Monroe, fifty miles from each place. The location being in hilly country makes it very healthy for good churches and a good school in the town. The town ships from 12,000 to 15,000 bales of cotton in a season. Very fine timber and plenty of good saw-mills are near the town. Fuel, either coal or wood, can be had very cheap."

Illustrations in The Chautauquan cover a wide range of interesting subjects. The frontispiece is a Rinehart print of a Sioux warrior. A large number of artistic views of the primitive "Louisiana Country" give color to the account of the expansion of the United States southward. Picturesque views of St. Cloud, St. Denis, St. Germain and Versailles are included in the "Reading Journey" to the suburbs of Paris, while reproductions of the best-known pictures of Millet, Corot, Daubigny, Jacque and Rousseau are reproduced for the article on "Painters of the Barbizon School." Besides the usual portraits and cartoons, pictures are given of the supposed site of Paul Jones' grave in Paris, views of the lost town of Kaskaskia, and a photograph of the oldest Protestant meeting-house in the Western Hemisphere.

FOREIGN TRADE.

This department is designed to set forth opportunities for the extension of the trade abroad of American manufacturers, and to record facts about the rapidly-developing commerce of the South.

RUSSIA IN THE EAST.

Preparing to Avail Itself of Trade Opportunities.

Persons interested in the development of American trade in the Far East will find some significant statements in the report by Richard T. Greener, United States commercial agent at Vladivostok. He writes that Siberian papers continually refer to the time in the natural course of events when the vast and rich fields of Manchuria will become a part of the Russian empire in the East. He adds:

"Here is a territory with an area of 15,000 square miles and a population of 7,000,000 only awaiting the transforming process which has made Liandoon formerly Russian territory—the same process which occupied the Amur and the maritime provinces.

"Manchuria at the present time is the promised land toward which all speculative eyes in Siberia are turned. On the west, north and east Russian frontier unfolds it—the Amur since 1858 and the maritime province since 1860—all original parts of Manchuria. The Russian empire now has a firm grip at the south, not at all likely to be loosened, and no uprising or tumultuous advance, say Siberian writers, is needed to hasten the time when the ripe fruit will fall into the hands calmly waiting to receive it. The Cossack guards (4200 infantry, 1600 cavalry and 4000 'friends of China,' gangs of Chinese officered by Russians), now patrolling the line of the Eastern Chinese Railroad, and the cost of the railroad itself are all big items of national expense; but they are worth the outlay and show the foresight and resistless energy of the Russians.

"Much is said about the immense markets of the future to be formed among these Manchurians. There are wild tales of gold and the wonderful productivity of the soil. The natives themselves are a hardy, stalwart race, differing widely from their Chefoo and Hongkong and Shanghai confreres. Even in arranging the details of the grants of land and right of way, the Chinese home government is obliged to use greater caution in dealing with its northern subjects.

"The Chinese Eastern Railway is sometimes ironically called 'the Manchurian branch of the Siberian Railway' (twenty-two sections of the main line are now completed, making more than 1500 miles; Monkden to Port Arthur is already finished, and Stretinsk to Vladivostok will next be finished). It is no longer ironical; it is a sober fact.

"There lately passed through Vladivostok a representative of the St. Petersburg British embassy. This gentleman had visited Habin, the great railroad center of Manchuria, a town of 6000 people, which sprang up in eighteen months. The branch of the Russian-Chinese Bank at this place had 5,000,000 taels on hand, and 1,000,000 additional had been sent within a week.

"He had inspected the line, noticed the trend of improvement, and the rapidity with which all the railway work through Manchuria was being pushed. He saw much waste of material. But whether government property is properly handled and accounted for, or prodigally used, the road is progressing. It is thoroughly guarded; the Chinese themselves are being transformed into workingmen, guards, etc."

He notes as an important part of the programme of Russia in the East the dedication at Vladivostok of the new institute for Eastern languages, Chinese, Japanese and Korean. Whatever trade there is to be in that region Russia is preparing in this way to handle.

NO FEAR OF COMPETITION.

Canadian Canal System Will Not Affect Southern Railway's Export Traffic.

The recent completion of the improvements to the Canadian canal system has resulted in the formation of a company headed by W. J. Connors of Buffalo, N. Y., which has made arrangements to build a series of elevators at Montreal with the view of diverting export traffic to Europe from the Northern ports of the United States by way of the Great Lakes, St. Lawrence river and canal. At present steamers and barges drawing fourteen feet of water can proceed from elevator ports on Lake Superior, Chicago and other points to Montreal without breaking cargo. It is stated that the syndicate constructing the elevators will operate a line of vessels to the principal elevator ports on the Great Lakes, and that it will offer rates which will force the trunk lines running east and west to lower their tariff if they are to secure the same volume of export business as in the past. It is also stated that the new route will be a competitor to lines terminating at Southern seaports for business originating in the Northwest.

An official of the Southern Railway Co., in speaking of the Canadian plan, does not believe that it will decrease the export trade of this company. In an opinion given to the Manufacturers' Record he said:

"No scheme to increase the movement of grain from the Northwest through Montreal to foreign ports is likely to affect the movement via the Southern Railway to and through Norfolk or other Southern ports reached by our line. Such grain as we have handled or expect to handle will have origin in and about the Ohio river, St. Louis, Southern Illinois and Missouri river points, and the proposition to increase the movement from the Northwest will not interfere with the movement of grain from the territory named through the ports which we serve. My understanding is that the ocean rates which have heretofore been made on grain and flour from Montreal have been such that it is not likely anything will be done in the way of rates which could offer greater inducements than heretofore."

Mr. H. F. Smith, traffic manager of the Nashville, Chattanooga & St. Louis Railway Co., expresses the opinion that the St. Lawrence river route would be the strongest competitor to the North Atlantic ports, and that the proposed plan will not materially affect the movement of export traffic through South Atlantic and Gulf ports.

Increase in Coal Exports.

The possibilities for exporting more Southern coal are strengthened by a report that a contract has been let by a firm of Welsh shippers to supply foreign consumers with 400,000 tons. The bulk of the supply for English steamships comes from Wales, and, as recently noted in the Manufacturers' Record, prices have advanced considerably. In case the British government is unable to obtain an adequate supply of coal at the Welsh and Lancashire mines, it will be obliged to look to the United States and make contracts, as it has already done several times in the past. No other supply suffi-

cient in quantity is available for its purpose except in this country.

Commenting upon this the New York Commercial says:

"Until there is an 'open door' and open coal mines in the Orient for every European nation, all foreign countries, excepting only China and Japan, must look ultimately to the United States for their coal supply. Italy is now taking a large amount of coal from the United States, and since her own mines are capable of producing only about two-fifths of her needs, she is likely, sooner or later, to come here for all the foreign coal she may require. The export of coal from the United States has not hitherto been large, as compared with other exports, but it is a trade that is capable of extraordinary expansion."

Large Contract for Coal.

Messrs. B. D. Wood & Sons of New Orleans in a letter to the Manufacturers' Record confirm a recent report that they have made a contract for a large quantity of Alabama coal. The contract is made with four of the principal mines in Walker county, and the fuel will be sent to New Orleans by way of Greenville, Miss., where it will be loaded on barges. In their letter Messrs. Wood & Sons write as follows:

"The amount of business in sight for this year is already about 250,000 tons, and this will probably be increased as fast as the facilities can be provided to handle it. So far the bulk of the coal contracted for is for use for railroads, sugar plantations, irrigation plants and other industries, but it is expected that contracts will be made for furnishing bunker coal to steamers within a short time. In quality the coal compares very favorably with Pittsburg, and, being placed on the market at a less price, it has been making serious inroads into the trade formerly controlled by Pittsburg." It is interesting to note that this firm has been a large handler of coal from Pittsburg and vicinity in the past.

Demand for Locomotives.

Messrs. Burnham, Williams & Co. of the Baldwin Locomotive Works of Philadelphia are strongly in favor of the French reciprocity treaty now before Congress. In a letter to the Manufacturers' Record they say: "The ratification of this treaty is, we believe, a matter of utmost importance to American manufacturers seeking an extension of foreign trade. We believe that if this treaty is consummated our industries will find a large market in France. We are at this time engaged in the construction of upwards of fifty locomotives for French railways. The treaty provides for a very substantial reduction of duty upon locomotives entering France. The ratification of the treaty will, therefore, place us in a position much more favorable than we now occupy for securing a large share of business in that country. We believe our own case is but one among many to be similarly benefited."

Should Follow Its Example.

The New York Commercial selects the city of Mobile, Ala., as an example for the metropolis to pattern after in making greater efforts to increase its export trade. In commenting upon the enterprise shown by Mobile the Commercial says: "Take the little city of Mobile, Ala., as an example. It has increased its depth of water and otherwise improved local conditions, so that goods formerly seeking more northerly ports are now attracted thither. Trade seeks the line of lowest freight rates. This is a lesson which New York has learned to her cost,

but one which she does not seem to have taken to heart as a community."

Jamaica Imports.

Mr. A. Augustus Brown of Port Antonio, Jamaica, in a letter to the Manufacturers' Record says that importations to Jamaica are increasing, the major portion of articles, especially foodstuffs, being from the United States. A large export business in fruit, sugar, dyewoods, etc., is also done. Mr. Brown is a general importer, and is also engaged in the fruit business. He expresses a willingness to give all necessary information to anybody disposed to enter that business.

Depends on the Bill.

A report has been current that Messrs. William P. Clyde & Co. had contracted for two additional steamships to be used in the fleet of the Clyde Line between New York and South Atlantic ports and the West Indies. In a letter to the Manufacturers' Record Messrs. Clyde & Co. write that they have made no contracts as yet, and that their decision would depend considerably upon the shipping bill now being considered in Congress.

Jottings at the Ports.

The Tidewater Transportation Co. has been organized at Newport News, Va., to operate a ferry system between points on Hampton Roads. Among the incorporators are R. G. Bickford and H. W. Leigh of Norfolk, Va.

United States Minister Charles P. Bryan at Petropolis, Brazil, reports that the San Francisco Railroad in the State of Bahia, Brazil, requests bids for 5000 tons of soft coal yearly, and also desires catalogues of iron structures.

During the month of January 4,124,231 bushels of corn were exported from New Orleans, an increase over January, 1899, of 2,500,000 bushels. Four of the steamships which cleared from New Orleans in January carried full cargoes of corn. It was sent not only to British ports, but also to Hamburg, Antwerp, Rotterdam, Bremen, Barcelona, Havre and Copenhagen.

The new warehouse built by the Illinois Central Railroad Co. on its water-front property at New Orleans has been completed. It is 1201 feet in length, 101 feet wide and occupies nearly three acres of ground. It is divided into ten sections separated by fireproof walls, and it is estimated will hold 15,000 bales of cotton. It is one of the largest buildings of the kind in this country. It will be used entirely for the foreign business of the railroad company.

Frank Leslie's Popular Monthly for February numbers among its literary contributors such celebrities as Gen. Nelson A. Miles, Bret Harte, M. E. M. Davis, Egerton Castle, Jeannette Walworth, Anna Randall Diehl, Jennie Betts Hartswick, Harold Bolce, Mabry-De Zapp and ex-Superintendent R. C. Jackson of the Railway Mail Service. All these writers are interesting in their respective lines, and the pictorial illustrations accompanying their articles and stories in this number of Frank Leslie's Popular Monthly are even more profuse and elegant than usual.

The three large centrifugal pumps connected with the new drainage system of New Orleans have been satisfactorily tested. They are capable of discharging 360,000 gallons of water a minute.

The output in the Joplin (Mo.) district in the week ended February 3 was 9,576,570 pounds of zinc ore and 903,370 pounds of lead ore, valued at \$162,882.

RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

LOUISVILLE & NASHVILLE PLANS.

To Build 129 Miles of Extensions in Alabama This Year.

The Louisville & Nashville Railroad Co., in spite of the large outlay made for improvements and extensions in 1899, has decided upon as elaborate plans for the present year. Two companies have recently been formed which will act as auxiliaries in carrying them out. One is the North Alabama Railway Co., which has recently been commissioned in the State mentioned. It includes President Milton H. Smith of the Louisville & Nashville, H. W. Bruce, C. Quarrier, J. H. Ringgold, W. D. Hines, William W. Thompson of Louisville and J. M. Falkner of Montgomery.

Several of these gentlemen are also connected with the company. The road is proposed from a connection with the Louisville & Nashville in Cullman county to a connection with the Birmingham Mineral division, near Bessemer. It is to be built in a southerly direction, passing through Walker and Jefferson counties, and will be seventy-five miles in length, including about three miles of track through the Brookwood coal deposits.

This line, which was surveyed several months ago, will give the Louisville & Nashville another route through the Walker coal fields and a portion of the Warrior river country. It will pass through a locality which is the center of much industrial activity, and which will furnish it a large amount of local traffic, but aside from this, the road will form an additional link in the new route which the Louisville & Nashville seems to be completing between Birmingham and Pensacola. Last year it built one section between Repton and Pineapple, Ala., which completed the line between Selma and Pensacola. With the North Alabama Railroad and forty miles of road between Blocton and Selma, the new route, which will be much more direct than at present, will be ready for operation of train service.

The extensive terminals which the Louisville & Nashville has built at Pensacola within the last few years indicate that it considers this port as one of its principal exporting points. As readers of the Manufacturers' Record are aware, large quantities of grain, pig-iron, as well as cotton and other foreign shipments, are already being hauled to Pensacola, but the line from Birmingham will greatly increase this traffic, making Pensacola to the Louisville & Nashville what Newport News is to the Chesapeake & Ohio.

In addition to the North Alabama, the Manufacturers' Record is officially informed that contracts have been let for what is termed the Alabama & Florida Railroad between Andalusia and Geneva. This is another line in Southeastern Alabama which will traverse a heavily-timbered region, which also creates much other traffic. The road will be forty-five miles in length, and is to be completed during the present year.

It is also announced that the Louisville & Nashville has made arrangements to make contracts at once for a branch seven miles long, connecting on the main line at Hanceville, Ala., and reaching the property of the Stoud Mountain Coal & Coke Co. This branch will involve an outlay of about \$50,000.

These projects will add 129 miles of new line to the system, and represent an expenditure of over \$1,000,000. The

plans form an indication of what the Louisville & Nashville management thinks of the outlook for business in the South.

The Chesapeake & Ohio's President.

A gentleman who was for many years closely connected with the Chesapeake & Ohio Railroad, but who is not now in its employ, has, at the request of the Manufacturers' Record, furnished the following facts regarding Mr. Geo. W. Stevens, the new president of that road. These facts are of great public interest, because they indicate the ability of the man who will control that magnificent railroad system. He writes:

"Mr. Geo. W. Stevens, who has been elected president of the Chesapeake & Ohio Railway to succeed Mr. M. E. Ingalls, was born at Utica, Ohio, June 29, 1851. He entered upon his railway career as a messenger boy on the Baltimore & Ohio Railroad. A brief review of his life is interesting indeed, and should be an incentive to others. He has always found room at the top. On the Baltimore & Ohio Railroad he was regularly promoted through various minor positions to station agent and assistant train dispatcher. He left that road in 1870 to enter the services of the Pan Handle as a station agent. Here he was soon appointed train dispatcher, leaving in 1873 to become a division superintendent of the Wabash. In 1887 he was made assistant general superintendent of the entire Wabash system. He became superintendent of the Eastern divisions of the Chesapeake & Ohio Railway in 1890. The Chesapeake & Ohio Railway at that time had but recently acquired the Richmond & Allegheny Railroad, now the James River division, and the line down the Ohio river to Cincinnati had just been completed. Thus the Chesapeake & Ohio had been suddenly converted into a trunk line in fact. The traffic was increasing by jumps, and the transportation department of the road was in a chaotic condition. The newly-acquired James River division had not a sidetrack throughout its length that would hold a single freight train under the new order of things. The men had just been moved with the traffic from the mountain district to this division, and were all as strange to it as was the new superintendent. Accidents were, of course, numerous, and much discontent prevailed among the entire personnel of the road. Recent floods had left the track and structures in a deplorable condition. With skill and amazing energy he produced order out of chaos.

"A liberal management enabled him to rapidly improve the physical condition of the property under his charge, and he was soon slated for more extended authority. In a few months the Western division transportation department made a bad comparative showing, and Mr. Stevens was made superintendent of transportation of the entire line, and very shortly afterwards general superintendent in charge of all the operations of the road, there being no general manager over him. With all that ease that had characterized his minor administrations, he steadily put the system in the same condition of excellence that marked the Eastern divisions. In 1892 his title was changed to general manager.

"His careful study of his subordinates made his selection of assistant officers most judicious, and rapid changes of officers on the Chesapeake & Ohio Railway ceased, as he seldom made mistakes. For five years he labored incessantly, always overcoming difficulties with modern methods and masterful energy. His road by that time had taken its rightful place among the important and well-managed roads of the East. He has for years

taken an active part in the Railway Managers' Association, and has always been assigned to important committees. There has never been a time since he became connected with this road that he has not been ready to listen to the personal appeals of his subordinates in all the branches of the service, and to further their interest. He has the respect, confidence and affection of all of them, from the highest to the lowest. Today, as the result of his splendid career there, the esprit de corps of the Chesapeake & Ohio Railway is second to none, and he is handling successfully and satisfactorily a tonnage more than four times as large as when he entered the service ten years since."

Honoring a Worker.

Governor Johnston of Alabama is seeking the co-operation of the governors of South Carolina, Georgia and Florida to secure a memorial of Henry B. Plant, founder of the Plant system of railways and steamships, in token of the appreciation of the South of his services for its development. In a letter explaining the project Governor Johnston says that the suggestion is made because he is "impressed with the feeling of gratitude to a benefactor of the South, and desiring that a suitable memorial be erected to testify our appreciation for the valuable services rendered the South by the late Henry B. Plant, a man who gave his wealth and his mighty creative genius to the upbuilding of the South. We erect statues of bronze and marble to soldiers and statesmen, and too often neglect and forget heroic souls, sometimes less famed, but none the less worthy, who have fallen by the wayside while struggling to create industries and laboring, as did Henry B. Plant, to advance the best interests of mankind. Henry B. Plant was a leader in the grand march of man. He has left the imprint of his genius on the South he dearly loved."

To Change the Gauge.

The directors of the Baltimore & Lehigh Railroad Co. have adopted a resolution favoring the change of this line from narrow to standard gauge. The Baltimore & Lehigh, which was formerly known as the Maryland Central, extends from Baltimore to Cardiff, near the Pennsylvania line, a distance of forty-three miles. It connects with the York Southern Railroad, a part of which was changed from narrow to standard gauge about a year ago. By making the improvements noted the Baltimore & Lehigh, with the York Southern, would form another standard-gauge route between Baltimore and York, Pa. It is proposed to rebuild the road with 70-pound steel rails. John Wilson Brown is president of the company.

An 80-Mile Branch.

The Central of Georgia Railway Co. will complete this year a branch about eighty miles long in Southeastern Alabama, extending between Dothan and Elton, passing through the towns of Hartford and Columbia. It will parallel the Chattahoochee river for a considerable distance, passing through portions of Henry and Geneva counties. This portion of Alabama is nearly destitute of transportation facilities by rail, and the branch will prove a valuable feeder to the traffic of the Central of Georgia. Mr. C. K. Lawrence, superintendent of construction, advises the Manufacturers' Record that all contracts have been let, and that it is calculated to complete the road about July 1.

Railroad Notes.

The Marion & Rye Valley Railway has been sold to A. J. Perry. This line is in operation in Smyth county, Virginia, reaching iron-ore deposits in that portion of the South.

A train consisting of eighteen carloads of soda was recently shipped to Texas by the Matthiessen Alkali Co. of Saltville, Va. It is intended for distribution to consumers in the Southwest.

The last report of the Lexington (Ky.) Street Railway Co. shows receipts for the last six months of 1899 amounting to \$113,672, while the net earnings were \$57,207. For the half-year the company earned \$12,000 in excess of all charges.

It is reported that a company is being formed to operate a line of steamboats on Chesapeake bay and the Miles and Choptank rivers in Maryland. Hon. Thomas C. Platt is reported as interested in the plan.

Mr. John H. Harris has been appointed general superintendent of the Choctaw, Oklahoma & Gulf Railway Co. Mr. Harris has been associated with several railroad companies in various capacities, and has been recently acting as assistant general manager of the Choctaw system.

The Georgia Southern & Florida Railway Co., in connection with the Atlanta, Valdosta & Western Company, has issued an excellent map of its lines and their connections. The map includes all of the Southern States east of the Mississippi river, and is extremely valuable for reference purposes.

The Mobile & Ohio Railroad has given an order for fourteen locomotives to be built by the Rogers Locomotive Works of Paterson, N. J. The company has also given an order for 500 freight cars to the American Car & Foundry Co. of St. Louis, while 100 additional freight cars will be built at the shops of the Mobile & Ohio.

A comparative statement of the earnings of the Nashville, Chattanooga & St. Louis Railroad for the last nine years shows a very fine increase in business. In 1899 the gross earnings amounted to \$6,138,000, an increase over the previous year of \$204,000. The earnings per mile averaged in 1899 were \$6564, the largest since 1891.

The Pocket List of Railroad Officials issued for the first quarter of 1900 contains a large number of officers connected with companies recently organized, and has evidently been brought up to date in this respect. It is one of the most valuable little works published in the interest of railroad companies, owing to the amount of information it contains and its convenient size.

The report of the earnings and expenses of the Northern Central Railway Co. for December, 1899, also for the year 1899, has been completed, and comprises the following details: Increase in gross earnings for the month of December was \$51,100, and the net increase \$48,300. For the year the gross increase was \$569,400, and the net increase \$97,700. The gain in earnings is undoubtedly responsible in part for the recent appreciation of Northern Central securities.

W. J. Williams of Glenwood, Mo., contemplates the removal of his woolen mill to Shreveport, La., or some other Southern city.

The Power Publishing Co. of New York has issued as a separate monograph, under the title "Condensers," a series of lectures and articles by F. R. Low, editor of Power, upon the subject of condensers, reprinted from the columns of Power.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

THE COTTON MOVEMENT.

Some Figures and Some Deductions Therefrom.

In his report for February 2 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during the 155 days of the season was 1,526,600 bales, a decrease of 2,040,321 bales. The exports were 3,385,983 bales, a decrease of 1,928,657 bales; takings by Northern spinners 1,717,011 bales, an increase of 107,703 bales; by Southern spinners 750,311, an increase of 70,638 bales.

Messrs. Latham, Alexander & Co. of New York issued a circular under date of February 3 reviewing the movement of cotton and the conditions on that day, from which they draw the following conclusions:

"It would appear that the total visible supply of cotton at this date is 309,580 bales less than in 1896, when the consumption was 11,532,000 bales. The consumption for this year is reckoned as large, if not larger, than last year, when it was 13,900,000 bales; hence an increased consumption of 2,368,000 bales must be met with 309,580 bales less supply than in 1896.

"The slight increase in receipts at the ports during the last two or three weeks may have somewhat puzzled believers in very low figures for the total yield of the current crop, and has doubtless encouraged those who have thus far insisted that there was considerable cotton held back at uncounted interior towns and on plantations. Our correspondents explain the recent heavier movement in this way:

"Up to January 1 last year the exports of cotton were very large; to the same date this season they were abnormally small—on this account, and also because the wagon roads throughout the cotton belt were bad at this season, last year the January movement was very light.

"This year country roads have been good, and both home and foreign spinners, because of low stocks, have recently been anxious and liberal buyers in the South. These facts have made not only the overland movement, but port receipts, heavier than they would have been under conditions more analogous with those that prevailed at this time last year.

"We are not the least dissuaded from our previously-expressed conviction that the current crop will prove a short one. In strong support of that opinion, it must be remembered that the receipts last March and April were enormous, there having come into sight during those months 1,052,117 bales, the bulk of which was in the fields on the first day of March.

"Today the fields are literally bare, picking is completely over, plantations' supply is small, and for receipts from now on we have only to look to the uncounted interior towns."

Cotton-Duck Manufacturers.

The adjourned stockholders' meeting of the Mount Vernon-Woodberry Cotton Duck Co. was held this week at Baltimore. Preceding the meeting of stockholders a meeting of the executive committee was held, at which was submitted

the reports of the constituent companies. The statements show net profits for the four months ending December 31 (the company having been organized September 1) of \$609,433, or on the basis of \$1,828,299 per annum. The fixed charges per annum being \$350,000, would leave on this showing \$1,478,299, and after deducting \$300,000 interest on the income bonds, would leave \$1,178,299 applicable to dividends on stock and surplus account. It is stated that since this company was organized these earnings were made without any increase in the price of goods and without savings from consolidation, which will not become effective until this year.

The directors elected the following officers: President, Richard Cromwell; vice-presidents, J. Spencer Turner, W. K. Cromwell, James E. Hooper, C. K. Oliver, also treasurer, and D. H. Carroll, secretary.

This company is stated to control nearly 90 per cent. of the cotton duck made in this country. All the mills are in the South except one in Connecticut.

To Double Its Output.

[Special Cor. Manufacturers' Record.]
Anniston, Ala., February 5.

I. W. Adams of Boston, treasurer of the American Net & Twine Co., spent a few days here last week and completed arrangements for doubling the force in the branch mill established in this city two years ago. The mill here was established largely as an experiment, but it has been a magnificent success. The company has decided to double the output by running night and day. The night force will be put on Monday, February 12, and the number of operatives increased from 150 to 275 or 300.

\$20,000 Knitting Mill at Griffin, Ga.

Messrs. J. D. Boyd, J. J. Mangham, Douglas Boyd and J. W. Mangham of Griffin, Ga., have completed all arrangements for the establishment of a \$20,000 knitting plant. Contract for all the machinery has been awarded, and the company will be organized at once to build the mill. The mill will have a daily capacity of 100 dozen suits, using a 40-horse-power steam-power plant.

North Carolina Mills.

The annual report of the commissioner of labor statistics of North Carolina places the number of mills in the State in active operation at 241, with 25 in course of construction; the number of spindles 1,145,912, and the number of looms 25,819. The horse-power operated is 51,672. Included in the mills are eleven woolen mills and twenty-six hosiery, knit-goods, net-twine and silk mills.

Textile Notes.

The Bennettsville (S. C.) Cotton Mill is adding 4000 new spindles, which will give it 15,000 in all by May 1.

R. A. Almand of Washington, Ga., will build a knitting mill for the production of hosiery and underwear. Machinery has been ordered.

The Chesapeake Knitting Mills of Berkley, Va., will erect an additional building, install new machinery and otherwise improve and enlarge its plant.

The Bristol (Tenn.) Knitting Mill Co. has been organized, with capital stock of \$100,000, to build a plant that will employ 200 hands. Leo. Kauffman of Nashville, Tenn., is president.

The Savannah (Ga.) Cotton Mill has been idle for several years. Last week N. H. Tilton of New Hampshire bought the plant, will overhaul and improve it and commence yarn production.

The stockholders of the Ada Manufacturing Co. of Charlotte, N. C., held their annual meeting during the week. A semi-annual dividend of 3 per cent. was declared, and it was decided to put in some new machinery.

The Gaston Manufacturing Co. of Cherryville, N. C., has placed orders for about \$50,000 worth of new machinery. This additional apparatus will just double its present equipment of 3400 spindles and 96 looms.

A \$250,000 stock company will be organized at Williamston, S. C., to erect a cotton factory, and will apply for charter as the Williamston Mill. The incorporators will include G. W. Sullivan, Jas. P. Gossett, G. H. Mahon and others.

Messrs. H. P. Duvall, H. W. Finlayson, A. L. Evans, R. M. McKay, W. R. Godfrey, R. T. Gaston and W. D. Malloy of Cheraw, S. C., have incorporated the Cheraw Cotton Mills, with the purpose of building factory. The capital stock is \$100,000.

The Charleston (S. C.) Post is authority for the statement that the Vesta Mill Co. of that city, which employs negroes, is so well satisfied with its experiment that it has bought land upon which two-story frame cottages for the operatives will be built.

The stockholders of the Sumter (S. C.) Cotton Mills held a meeting last month, at which the erection of another 5000-spindle plant was discussed. The directors were ordered to investigate the feasibility of such action and report to the stockholders.

A dispatch from Atlanta, Ga., says that New York capitalists who have invested \$1,000,000 in North Carolina mills have been visiting the mills of Georgia with a view, if conditions are favorable, to investing even as much as \$5,000,000 in the textile industry.

Charter has been granted to the Enfield (N. C.) Cotton Mills, with capital stock of \$75,000, and privilege of increase to \$300,000; purpose, to build a cotton factory; incorporators, Messrs. Thomas H. Battle, R. H. Hicks, Alex. P. Thorpe, L. Q. Tillery, James C. Braswell, A. M. Fairly, H. P. Strause, F. G. Toepleman, C. J. Burton, F. W. Gregory and others.

The Union Manufacturing Co. of Union Point, Ga., has completed all arrangements for the installation of the spinning plant recently reported as under consideration. Contract has been given for all the spindles (2400), generators, engines, etc., for the production of yarns, to be operated in connection with the present underwear and hosiery plant. A prominent firm of Southern architects will execute the contract and plans.

The Dardanelle Cotton Mills of Dardanelle, Ark., has incorporated, with capital stock of \$100,000, and will operate the 3000-spindle cotton factory located by J. D. Kennedy of Cincinnati, Ohio, as announced several months ago. W. H. Gee is president; C. B. Cotter, vice-president; J. D. Kennedy, secretary-treasurer-manager; J. H. Page, J. K. Barr and Z. J. Price are also interested. The mill's product will be both fine and coarse yarns.

It has been rumored several times that a cotton factory would be built at Newport News, Va., by Mr. Collis P. Huntington of New York, president of the Newport News Shipbuilding & Dry-Dock Co. Referring to these rumors last week Mr. Huntington is reported to have stated that Boston parties whose financial standing is excellent had made him an offer for the location of a \$1,200,000 cotton-manufacturing plant at Newport News, and that in all probability the offer will be accepted and the plant ensured.

PHOSPHATES.

Florida Phosphates.

[Special Cor. Manufacturers' Record.]
Ocala, Fla., February 5.

The phosphate miners, or at least all of those who control rock enough to affect the market, are holding firm, and are only filling such contracts as can be made at a price which they deem is in keeping with the supply and demand. The dealers across the water are backward with their offerings, but the miners are not at all uneasy, as they can hold out until the dealers see fit to give them their price, and rightly calculate that the limited supply of rock will eventually win the battle for them. The principal and all provident miners made enough money last year to carry them along nicely regardless of this year's sales. In a nutshell the conditions are these: There is just so much demand for high-grade phosphate. The present known supply is not more than enough to supply this demand for a few years. The new discoveries are not equal to the amount being mined, and consequently the miners are very safe in holding for their price, which will follow in due time.

Some prospecting is being done in the hard-rock section in a steady, systematic way, largely on lands already known to contain phosphate, but where the deposits were not fully and definitely located a number of paying deposits have been found. This work is being pushed largely in Citrus county.

The shipments of this section were light for January, but will be somewhat heavier for February.

J. V. Burke, who has been engaged in mining near Montbrook for the past two years, has removed his plant to Harts-horn, where he will continue to mine.

The Leroy County Phosphate Co. has bought the plant and machinery, railroad iron, etc., of the Live Oak Phosphate Co., and is moving the same to Standard, where they will be put in operation again.

Hassard & Shipman have their new plant at Juliette almost ready for business.

Phosphate Markets.

Office Manufacturers' Record,
Baltimore, Md., February 8.

There has been a fair movement in the market for phosphate rock, and values are very steady. Scarcity of cars at points of production, as well as a light offering of desirable vessels, has a tendency to restrict business. Fertilizer manufacturers, both local and from out of town, are buying more freely. Among the phosphate charters for the week were the following: Norwegian steamers Alf, 1970 tons, and Bogstad, 1982 tons, from Savannah to United Kingdom or Continent at 15/; February-March; British steamer Scawby, 1471 tons, from Tampa to La Pallice at 20/9, March, and British steamer Linen, 1507 tons, from a Southern port to United Kingdom or Continent on private terms. The various reports received during the week from all sections of the phosphate belt are most favorable, the work of mining rock being vigorously pushed, while prices are generally steady to firm. The demand for South Carolina phosphate is good, both in a domestic and foreign way, while values are steady. In Florida miners are disposed to hold their rock rather than accept lower values, and indeed the general impression is that prices will advance, especially for foreign rock. There is a good inquiry from foreign ports, but buyers abroad and sellers at home are somewhat apart in their views in regard to values. The situation in the Tennessee phosphate field is unchanged, the work of development being

pursued with the usual enterprise. Shippers have still great difficulty in securing cars, and with a scarcity of seaboard vessels stocks are accumulating. Values at Mt. Pleasant on the 6th inst. were steady at the following figures: 75 per cent. phosphate rock \$2.75 to \$3, and 78 to 80 per cent. \$3.75 to \$4.

Fertilizer Ingredients.

The general market for ammoniates is firmer, with a fair inquiry and good demand from Eastern and Southern sources. Stocks in the West are reported light, and firmly held at outside figures. Messrs. Thos. H. White & Co., in their circular for January, say: "Animal matter of all kinds has been in good request the past month, with a gradually hardening market, showing at the close an advance of \$2.50 to \$3.50 per ton upon quotations of 1st ultimo. Stocks are small, all substitutes are high and inquiry general. We look for a strong market this month."

The following table represents the prices current at this date:

Sulphate of ammonia (gas)....	\$3 00 @ 3 05
Nitrate of soda.....	1 85 @ 1 90
Blood.....	2 25 @ 2 27 1/2
Hoof Meal.....	1 90 @ 1 95
Azotine (beef).....	2 10 @ —
Azotine (pork).....	2 10 @ —
Tankage (concentrated).....	2 07 1/2 @ 2 10
Tankage (9 and 20).....	2 25 & 10 1/2 @ 2 30 & 10
Tankage (7 and 30).....	19 00 @ 19 50
Fish (dry).....	20 00 @ —
Fish (acid).....	12 00 @ —

Phosphate and Fertilizer Notes.

The schooner Annie C. Grace cleared last week from Charleston, S. C., for New York with 756 tons of phosphate rock.

The shipments of Tennessee phosphate rock from the port of Pensacola, Fla., for the month of January, 1900, amounted to 15,392 tons.

The British steamship Nitocris cleared from Savannah last week for Bremen, having 1373 tons of high-grade Florida phosphate rock among her cargo.

It is stated that phosphate rock has been found near Parsons, Tenn. A number of prospectors are at work on the properties, the output of which is showing up well, both in quality and quantity.

Mr. J. Rice Smith, formerly of Berryville, Va., was recently elected a vice-president and director in the Virginia-Carolina Chemical Co., and was also retained as manager of the Georgia Chemical Works' branch of the company, with headquarters at Augusta, Ga.

The commissioner of agriculture of the State of Alabama reports the sale of fertilizer tags up to February 1 for the present season as numbering 276,210, bringing in \$13,810.50. The sales for the same time last year up to February 1 were 657,100, bringing in \$32,855, over twice as large as they have been this year.

For the month of January, 1899, the sale of fertilizer tags in Georgia, at one cent a tag, amounted to \$5233, and for the month of January of the present year the sale of tags aggregated over \$11,000. Two hundred and fifty thousand tags were sent by the department of agriculture on the 31st ult. covering orders received in the month of January.

The phosphate rock which has been found near Lynnvill, Tenn., is pronounced by competent judges of superior quality, and is found in paying quantities. The Giles Phosphate Co. having secured the right of way through farms between De Ray and Odd Fellow's Hall, a distance of six miles through that section, is now surveying preparatory to building a railroad.

The ship Papa Emanuel, formerly the British ship Knight of the Garter, now sailing under Spanish register, arrived at Fernandina, Fla., last week from Genoa, Italy. This ship is now loading at Fer-

mandina with 2200 tons of phosphate rock for Australia, and is the first of a number of ships of the same class to be used in this trade. J. Castens is loading the steamship Dora with 2800 tons of phosphate rock for Hamburg. The shipments of phosphate rock for the month of January amounted to 7100 tons.

Messrs. J. M. Lang & Co. of Savannah, Ga., reports the shipments of high-grade Florida phosphate rock from that port for the month of January at \$508 tons, of which 5049 tons were cleared for Bremen, 1159 tons for Manchester and 2300 tons to Ghent. The steamship Melbridge cleared for Liverpool with 613 tons of Florida phosphate rock and steamship Angers with 995 tons of phosphate rock among their cargoes.

It is stated that negotiations which have been in progress for the purchase and development of several thousand acres of phosphate lands near Franklin, Tenn., by the Pennsylvania-Tennessee Phosphate Co. are proceeding smoothly, and the enterprise will soon be started. A large number of men will be employed in mining rock, part of which will be exported and the remainder crushed and made into fertilizer. The company has just increased its capital stock to \$1,000,000.

Cottonseed-Oil Notes.

Shipments of cottonseed products from Pensacola for the month of January, 1900, amounted to 21,437 sacks of cottonseed meal and 330 barrels of cottonseed oil.

The Carolina Cottonseed Oil Co. of Shelby, N. C., has been organized to build an oil mill. The capital stock of the company is \$20,000. The promoters are J. D. Lineberger, J. P. Dellinger, Michael Plouk, J. J. McMurray and others.

A cotton-oil mill company has been chartered at Bamberg, S. C., with a capital stock of \$250,000. The corporators are F. M. Bamberg, E. R. Hays, Conrad Eberhardt, H. J. Brabbam, John F. Folk, H. C. Folk and Havelock Eaves. The capital stock is to be \$15,000, of which \$8000 will be common stock.

Cottonseed products have generally ruled firm and higher at Texas points during the past week, oil having advanced $\frac{1}{2}$ c. per gallon and linters about $\frac{1}{4}$ c. per pound. Cottonseed meal and cake are unchanged. Quotations at the close of the market on the 5th were as follows: Prime crude oil, loose, 30 to 30 $\frac{1}{2}$ cents; prime summer yellow oil, 33 to 33 $\frac{1}{2}$ cents, and linters, 3 $\frac{3}{4}$ cents per pound, all f. o. b. mill at interior points; prime cottonseed cake and meal, \$21.50 to \$21.75 per ton delivered at Galveston. Houston mills are paying \$12 per ton for seed f. o. b. interior points.

The New Orleans market for cottonseed products has ruled firmer during the past week. Cottonseed oil has taken an upward turn, and crude in tanks that sold a week ago for 30 $\frac{1}{2}$ cents is now held at higher figures. The demand for cottonseed cake and meal is fair, mostly for export. Receivers' prices are quoted in the open market as follows: Cottonseed, \$11 per ton (2000 pounds) delivered here; cottonseed meal jobbing at depot, \$21.50 per short ton and \$23.25 to \$23.50 per long ton for export f. o. b.; cottonseed oil, 30 cents per gallon for crude loose f. o. b. in tanks here; in barrels, 33 $\frac{1}{2}$ to 34 cents, and 37 cents for refined oil at wholesale and for shipment; oilcake, \$23.25 to \$23.50 per ton f. o. b.; linters—A, 3 $\frac{1}{2}$ to 4 cents per pound; B, 2 $\frac{1}{2}$ to 3 cents; C, 2 to 2 $\frac{1}{2}$ cents; hulls delivered at 20 cents per 100 pounds, according to the location of the mills.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record,
Baltimore, Md., February 8.

The record of the week in local lumber circles presents a fair volume of business, the most prominent feature being the firm tone in prices throughout the general list of grades and dimensions. The volume of business for the week, however, was lighter than usual in some lines, but at this period of the season local buyers are not adding materially to their stocks. North Carolina pine holds its place for kiln-dried lumber, which has been moving freely. Air-dried lumber is steady, but buyers are not purchasing to any extent, the demand from box factories, yardmen and builders being light, while out-of-town buyers have been in the market during the week making some good purchases. White pine is moving, and prices firm, with stocks not excessive. Hardwoods continue to show considerable activity, while the demand for desirable lots of dry lumber is very spirited; even green lumber continues to sell freely. Ash and oak are firm, with a slightly higher range of prices. Poplar is firm, with sales larger than usual. The export trade is fair, and the usual volume of business for this period is reported at this port, Newport News and Norfolk.

Jacksonville.

[From our own Correspondent.]
Jacksonville, Fla., February 5.

The first month of the new year has presented a most remarkable record in lumber shipments from this port, and the lumber industry as a whole presents many interesting features. There never was a period in the history of this industry when the outlook was so promising, and millmen generally look for a year of great progress in lumber and other wood products. The immense tracts of timber land which are now being developed in this section of the State will contribute materially to the volume of business at this port. This no doubt will be the great distributing port of the future, and both by water and rail the volume of trade will be larger from year to year. The railroads entering Jacksonville are all making extensive improvements at terminals and at points along their several lines, all evidently making ready for a largely-increased traffic. Take the business of this port for the month of January just ended, which has been one of the most prosperous of any month in the history of this port. During the month 121 vessels crossed the St. John's bar having a total tonnage of 92,407. Of this tonnage clearing coastwise were twenty steamers and twenty-eight sailing vessels, or a total tonnage of 43,946. In the primary industries that of lumber shows a record of 15,354,251 feet shipped during the month, of which coastwise shipments amounted to 13,521,160 feet, foreign 983,094 feet and by rail 850,000 feet. Of crossties 21,800 were shipped, and of shingles 3,714,000. The market for all wood products continues to show a most decided firmness in values, while all the mills, both here and at adjacent points in the State, have all the business they want at the moment. The members of the Retail Lumber Dealers' Association and ladies, numbering 212 in all, arrived in the city last week from Tallahassee, and were entertained by the citizens, visiting Cummer's saw-mill, the ostrich farm and other points. The prospects for a good

volume of business during the present month are excellent, and at the moment a number of charters are being closed of vessels to load lumber here for coastwise and foreign ports. Among the charters reported for the week were the schooner Florence Leland, 281 tons, Jacksonville to New York with lumber at \$7.75, and bark Rose Innes, 770 tons, Fernandina to New York with crossties at 24 $\frac{1}{2}$ cents.

Savannah.

[From our own Correspondent.]
Savannah, Ga., February 5.

Another week of activity has characterized the operations in the open lumber market of this port and adjacent milling sections in Southern Georgia. During the past week 3,033,180 feet of lumber and crossties were shipped from this port, of which 1,571,412 feet went to New York, 376,000 feet to Philadelphia, 935,768 feet to Baltimore and 150,000 feet to Boston. The demand seems to be in the main as decided as at any time during the past year, and manufacturers report stocks considerably reduced. Prices for desirable lumber continue very steady, the quotations being as follows: Minimum yard sizes, \$12.50 to \$14; car sills, \$13 to \$15; difficult sizes, \$16.50 to \$25; ship stock, \$25 to \$30; sawn ties, \$10.50 to \$11, and hewn ties, 33 to 36 cents. Receipts of timber at Darien are said to be quite liberal, as a rise in the upper streams has brought out considerable stuff, and manufacturers are consequently pleased at the present situation. A number of vessels were in the port of Darien last week loading for coastwise and foreign ports. At Brunswick the activity reported a week ago continues without interruption, while shippers have all they can do to dispose of their orders on file. Brunswick is now enjoying a fair trade with Spain and South America, large shipments also going to the West Indies and other ports. The offering of desirable vessels for carrying lumber is still light, with rates firm and unchanged. Among the charters reported during the past week were the following: Schooner R. F. Pettigrew, 834 tons, Savannah to Philadelphia with lumber at \$7; schooner Rob Roy, same, with lumber and ties at \$7.25 and \$7, respectively; schooner Lorina M. Snow, 315 tons, Darien to New York with lumber at \$7.50 spot; schooner J. M. Hamlen, 528 tons, Darien to Philadelphia with ties at 25 cents, and schooner Gladys, 645 tons, from Brunswick to New York with ties at 23 cents, and schooner E. W. Clark, same, at 23 $\frac{1}{2}$ cents.

Mobile.

[From our own Correspondent.]
Mobile, Ala., February 5.

As the season progresses the movement everywhere in this section in lumber and timber circles is becoming of greater proportions. In timber there is quite an improvement already this month, and shipments are likely to show up much better for this month than last. There is an active demand for sawn timber, and values rule firm, with a higher tendency. Stocks in the interior are light, and receipts are not likely to be much larger during this month. Sawn timber when placed upon the market will bring 15 to 15 $\frac{1}{2}$ cents per cubic foot, 40-foot basis, with contracts at 15 cents. Hewn timber is quoted firm at 14 to 15 cents, with contracts at 14 to 14 $\frac{1}{2}$ cents per cubic foot. Hewn oak is in good demand at 15 to 18 cents per cubic foot, and hewn poplar at 12 cents per cubic foot. During the past week 10,493 cubic feet of hewn timber were shipped, and of sawn timber 185,680 cubic feet, all to Great Britain and Continent. The movement in lumber is greater than during the fall of 1899, and is constantly expanding. The ship-

ments to Cuba are heavy, and to Central and South America large lots are going forward. Of 1,590,524 feet shipped last week, over half the amount went to Cuban markets. Reports from saw-mills in the interior are very encouraging, and orders are plentiful, while prices are very steady. The total shipments of lumber from this port since September 1, 1899, amount to 59,252,586 feet, against 24,090,370 feet last year. Freights on timber and lumber continue steady, with rates unchanged. From Gulf ports to New York with lumber \$9.25 to \$9.50 or Boston \$10; to Havana, \$7 to \$7.25; Gulf to Holland with timber 107/6, February, and Pensacola to Buenos Ayres with lumber, \$12.50.

Beaumont.

[From our own Correspondent.]

Beaumont, Texas, February 5.

Throughout this section the conditions surrounding the lumber industry have not materially changed during the past thirty days. Manufacturers are generally well satisfied with the outlook, and there is already a large spring business now on file at all the mills; in fact, the mills here have at the moment orders sufficient to keep them running until early summer. There is a good demand for all classes of building material, as well as for railroad timbers and ties. The foreign export trade is improving, and considerable lumber and timber is going forward from Sabine Pass. A matter of much concern to lumbermen in this section is the proposed channel through Sabine lake, connecting the Neches river with deep water at Sabine Pass. By this route lumber rates would be reduced 50 cents per 1000 feet, besides considerable saving in loading rates. The Reliance Lumber Co. is making some very extensive improvements in its plant in this city. A storage shed 75x300 feet has been nearly completed, and will be used for kiln-dried lumber. The mill and planer machinery has been thoroughly overhauled and the whole plant put in first-class order. The annual meeting of the stockholders of the Reliance Company was held last week, when the affairs of the company were found to be in a very satisfactory condition. A dividend of 8 per cent. on the capital stock of the company was declared. The officers elected for the ensuing year were as follows: William Wiess, president; Mark Wiess, first vice-president; E. C. Wiess, second vice-president; P. M. Wiess, treasurer, and H. d'Hebecourt, secretary. It is stated that local capitalists are about to erect at an early date a sash, door and blind factory. The plans of the promoters have not been made public, but it is asserted that work on the plant will commence in the near future.

Lumber Notes.

C. Boise of Abingdon, Va., who recently paid \$35,000 for a tract of timber land in Russell county, is establishing a band mill at St. Paul, Va., with a daily capacity of 30,000 feet.

The Honsberger Lumber Co. of Fort Smith, Ark., has been incorporated, with a capital stock of \$5000. The directors are R. A. Honsberger, president; D. R. Stevens and H. C. Maynard.

The South Georgia Lumber Co., with headquarters at Macon, Ga., has been incorporated, with a capital stock of \$30,000, of which \$8000 is said to be paid in. The incorporators are E. L. Martin, P. D. Todd and A. E. Causey.

E. W. & L. S. McGrath of Wicomico county, Maryland, have recently purchased two large tracts of timber land, one in Somerset county and the other in Wicomico county. A saw-mill will be

erected and the work of cutting the timber begun.

The Loomis & Hart Manufacturing Co. of Chattanooga, Tenn., is preparing to erect a large saw-mill at Ooltewah, Tenn. The company owns a large tract of valuable timber land there, and will work up the timber on this land into poplar and oak lumber.

The McGehee Trading & Stave Co. of McGehee, Desha county, Arkansas, has been incorporated, with a capital stock of \$5000. The officers of the company are Abner McGehee, president; Jennie McGehee, vice-president, and James McGehee, secretary and treasurer.

It is stated that a company of Georgian capitalists has recently purchased \$600,000 worth of pine timber from the Copley Lumber Co. near Fort McCoy, Fla. The syndicate, it is said, will erect one of the largest saw-mill plants in the South, employing over 200 men.

It is reported that the Ferd Brennen Lumber Co. of Cincinnati has removed its offices from that city to Chattanooga. The company has built an immense yard near Citico, on the Southern Railway, and has already yarded over 200 cars of fine oak, ash, gum and poplar lumber purchased in the South.

G. W. Stegall of Tullahoma, Tenn., who is erecting a \$40,000 band saw-mill at Huntsville, Ala., has chartered 300 cars from the Southern Railway for the purpose of moving 20,000 logs from his Scottsboro mill to Huntsville. Scottsboro, Ala., is developing into one of the largest timber markets in the State.

Mr. W. W. Tunis, one of the well-known saw-mill men of Norfolk, Va., has invented another saw, which he claims is a great lumber-saving factor, to be known as the horizontal band saw. Mr. Tunis greatly improved the Rhea saw about two years ago, and was the first to operate the vertical band saw in the South.

The immense lumber plant of the Parmelee-Eccleson Lumber Co. at Jacksonville, N. C., has been purchased by a Northern syndicate, who will remove the entire plant to New Berne, N. C. It is said that \$250,000 is involved in the purchase and removal, and that it is proposed to make the plant one of the largest in the South.

The timber men of Darien, Ga., have accumulated large stocks of timber on the Ochopee river, and receipts at Darien will be heavy during the present month. There were fourteen vessels loading on the 27th ult. with timber and lumber, including two ships and twelve schooners. Shipments of timber and lumber from Darien last week aggregated 3,500,000 feet.

C. W. Kennon & Co.'s palmetto saw-mill at Sanford, Fla., is now in full operation. It is probably the only mill in Florida, if not in this country, for cutting palmetto. The wood is difficult to saw, special machinery and saws being used. The mill of Kennon & Co. has a large output of pilings, and by a preservative used by the firm the wood so treated is rendered impervious to the ravages of the teredo.

The entire planing-mill plant of the Kingston Lumber Co. of Laurel, Miss., was destroyed by fire on the 29th ult. The loss over and above the insurance amounted to \$12,000. In addition to the planing mill, about 100,000 feet of lumber was destroyed, which was covered by insurance. The mill will at once be rebuilt, and will be equipped with modern machinery and on a larger scale than the former plant.

The Savannah Builders' Exchange was organized last week in Savannah, Ga. A

constitution and by-laws were adopted similar to those in use in other cities. The following officers were elected to serve for two years: President, J. R. Eason; first vice-president, John F. Freeman; second vice-president, William Armitage. The directors subsequently elected H. M. Ward, secretary, and L. A. McCarthy, treasurer.

An Austrian syndicate, with headquarters in Vienna, and with a capitalization of \$2,000,000, is at present negotiating for the purchase of a number of tracts of timber land in Southern Louisiana and Mississippi. Mr. F. Mueller of Vienna, a representative of the syndicate, is now on a visit to the Southern timber belt looking over property that is in the market. The Austrian syndicate is the first foreign buyer that has been in the Louisiana market for some time past.

The Linville River Railway in Western North Carolina has been completed from Cranberry into the white-pine forests along the Linville river, a distance of twelve miles. This road was built by the Ritter Lumber Co., a West Virginia corporation which owns 10,000 acres of pine and hemlock timber lands along the Linville river. The company has established a lumber mill at the eastern terminus of the railway, and is now cutting white-pine lumber at the rate of 50,000 feet per day.

The monthly meeting of the North Carolina Pine Association was held on the 2d inst. at Norfolk, Va. No business of any importance was transacted except receiving the reports of the officers of the company, the consideration of which was deferred until the next meeting of the association. The general opinion of members of the association indicated a strong market for lumber, with no unsold stock on hand and an active demand from all sections of the country. The officers of the association are Capt. J. L. Roper, president; E. C. Fosburg, vice-president; C. S. Russell, secretary, and R. S. Cohen, treasurer.

The February meeting of the Baltimore Lumber Exchange was held in the Builders' Exchange Building in Baltimore on the 2d inst. Mr. Lewis Dill, president of the Exchange, named the standing committees for the year. The special committee of the Exchange on exhibit at the Paris Exposition reported to the meeting that the showing to be made of Baltimore's lumber exporting, manufacturing and transportation interests will not be exceeded by that of any other city in the country. The annual convention of the National Wholesale Lumber Dealers' Association will be held in Baltimore early in March. The members will be the guests of the Lumber Exchange. Charles T. Stran was re-elected secretary of the Exchange.

Mr. Walter H. Tunis and a party of business men of Mt. Airy, N. C., made the initial trip over the Mt. Airy & Eastern Railroad on the 1st inst., going as far as Petigo's Mills, in Patrick county, Virginia. The road is well equipped, and a regular schedule will be put in force for through travel to the Pinnacles of the Dan river by March 1. The building of this road will bring out vast quantities of lumber that are being manufactured along the Dan river. Mr. W. H. Tunis is vice-president of the road, and in other enterprises is interested as vice-president and general manager of the Granite Mountain Hardwood Co. of Wilkes county, North Carolina; president of the Hot Springs Lumber Co. of Madison, N. C., and president of the Mt. Airy Lumber Co. of Mt. Airy, N. C., these companies controlling an aggregate of over 67,000 acres of virgin hardwood timber lands.

MECHANICAL.

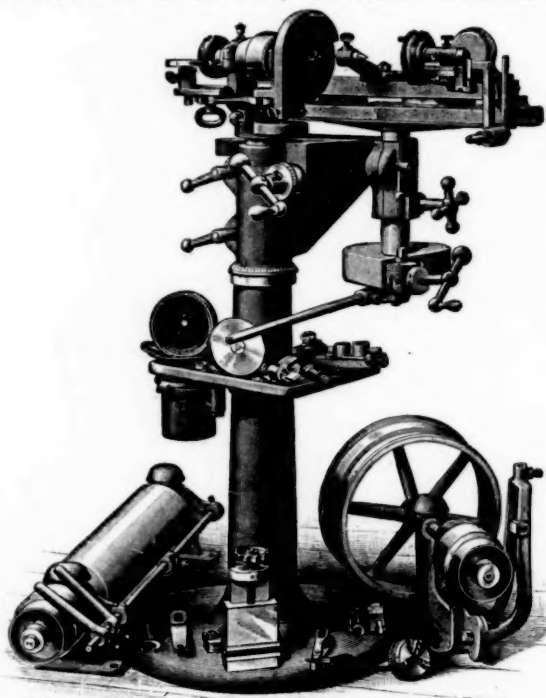
Universal Cutter and Tool Grinder.

The improved "Cincinnati" universal cutter and tool grinder here illustrated has been in great demand in both Europe and the United States, the manufacturer having now in successful operation about 1500 of these machines. A cutter grinder has become a recognized necessity in manufacturing shops for the sharpening of tools in general, and is especially profitable in connection with the milling machine, as it helps to reduce the first cost of that tool by keeping the cutters in their proper condition, which is essential for economical milling. The "Cincinnati" is designed for doing a large variety of both cylindrical and surface work. With this universal range it becomes, in addition to cutter and tool grinder, a very useful machine for general manufacturing, and is profitably employed in connection with the screw machine and lathe for bringing that class of either soft or hardened work which has been left from

the bearings. Both emery wheels are kept close to the bearings of the spindle, thereby avoiding the trembling which usually occurs on high-speed machines where an extended spindle is used, or when the emery wheels are not properly balanced. All the wheels furnished with the machine are carefully selected as to grade and mixture. For cylindrical grinding the work spindle is locked, as shafts, spindles, mandrels, etc., are revolved on dead centers. A loose pulley with two studs is placed on the nose of the spindle, which acts as a work-driver. A secondary drum and countershaft is furnished for this work. All surface grinding is done with a cup-shaped emery wheel, and the sliding carriage is swung into a right-angle position to the spindle.

All slides and working parts subject to wear are protected from the emery dust, and ample provision is allowed for taking up the lost motion. The materials throughout and workmanship are guaranteed by the manufacturer strictly of the highest grade.

For further information address the



THE "CINCINNATI" UNIVERSAL CUTTER AND TOOL GRINDER.

0.002 to 0.003 above size to a higher degree of accuracy. This method of finishing by grinding has become the universal practice where high-grade work and economical production is sought.

The "Cincinnati" is provided with all the necessary adjustments to grind between centers work to eight inches in diameter, metal-slitting saws, straight-face cutters, inserted-tooth mills, etc., to twelve inches in diameter, and saws such as used on cold sawing machines to twenty-four inches diameter. The centers take in a length of fifteen inches, and the table has a vertical adjustment of three and three-quarters inches. The longitudinal feed is twelve inches either by hand, lever or screw, and the transverse screw carries a graduated dial reading in thousandths. The end of table is also graduated to read in taper per foot and fractions of same. The work holder or swiveling head has a vertical and horizontal swivel movement, both adjustments of which are graduated to read in degrees. Cutters of any angle, right or left, can be ground on it, and by this feature many complicated attachments are done away with. The emery-wheel spindle is made of high-grade tool steel, hardened, ground and lapped, and runs in phosphor-bronze boxes. Dust caps are provided to keep the emery from

maker, the Cincinnati Milling Machine Co., Cincinnati, Ohio.

The latest issue of the University of Tennessee Record is devoted to the engineering work of the institution at Knoxville. The special papers include "Electric Transmission of Power in the Shops of the University of Tennessee," by J. R. McColl, professor of mechanical engineering, with a number of illustrations of the shops and their equipment, and "An Electric-Recording River Gauge," by W. W. Fulton, United States weather bureau observer and instructor in meteorology. Other articles are by J. O. LaBach, on "Commercial Analysis of Soaps;" by William E. Grainger, on the "Electrolytic Determination of Copper;" by Charles A. Mooers, on the "Chemical Analysis of Phosphate Rock"—these three being alumni of the university, and by Prof. Charles E. Wait, on "A Lecture Apparatus for the Decomposition of Water" and "A Simple Gas Generator," and by Prof. Charles A. Perkins, on "A Photometer with Direct Reading Scale."

The Everett Lumber Co. of Martin county, North Carolina, has made application to have its capital stock increased from \$25,000 to \$50,000. The company will also establish an office in Philadelphia.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted." In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

ALABAMA.

Anniston—Pipe-foundry Improvements.—The Central Foundry Co. (New York office, 100 Broadway) has let contracts for the erection of the buildings that will be required for its extensive improvements, previously reported. Buildings will be built by T. L. Houser & Co.; they will include 100x280-foot addition to main foundry, 50x100-foot cleaning department, 50x60-foot boiler and engine-house, all to be of brick and wood, with steel roofs.

Anniston—Car-wheel Foundry.—The Southern Car & Foundry Co. is about to repair, improve and put in operation this month its car-wheel foundry that has been idle several years.

Bessemer—Woodenware Factory.—J. T. Martin, W. L. Martin and J. H. Reed have incorporated the J. T. Martin Co. for the manufacture of woodenware; capital stock is \$2000.

Birmingham—Steel-rail Mill.—Erskine Ramsey, assistant general manager of the Tennessee Coal, Iron & Railway Co., is credited with stating that his company intends to build a steel-rail mill, but not this spring. Later a dispatch says that this plant will cost several hundred thousand dollars, and that the machinery has been ordered.

Birmingham—Coal Mines.—The South Mountain Coal & Coke Co. has been incorporated by Robert Stephens, Z. L. Nabers and W. T. Hand, with a capital stock of \$40,000. The company has purchased valuable mineral lands in Northern Blount county, and will open extensive mines at once, to which the Louisville & Nashville will build a branch line.

Birmingham—Lumber Company.—Incorporated: The Dukes Lumber Co., with capital stock of \$1000.

Birmingham—Lumber Company.—Incorporated: The Sterrett Lumber Co.; capital stock placed at \$6000.

Boxcove—Saw-mill.—John Harris, Jr., and an associate have built a saw-mill.

Evergreen—Paper Manufacture.—R. Thomas is mentioned in connection with experiments for manufacturing paper-pulp from cotton-seed hulls.

Gadsden—Pipe Works.—The Central Foundry Co.'s improvements at its Gadsden

plant will include the erection of several new buildings and the installation of a large quantity of machinery, most of which will be removed to this point from other plants of the company. Gerard Schumacher of 100 Broadway, New York city, is secretary.

Gold Ridge—Churn Factory.—R. C. Sprattling is reported as contemplating the erection of a churn factory.

Iron City—Iron Mines.—J. G. Adams & Co. of Anniston, Ala., have purchased and will operate the iron mines of J. J. Tolleson at Iron City.

Ozark—Cotton-rope Factory.—The Ozark Gin & Milling Co. contemplates putting in later on machinery for the manufacture of cotton rope, as reported lately.*

Pelham—Shingle Mill.—The King Lumber Co. of Birmingham has commenced the erection of a shingle mill at Pelham.

ARKANSAS.

Dardanelle—Cotton Mill.—Chartered: The Dardanelle Cotton Mill, capital stock \$100,000, to operate the 3000-spindle cotton mill previously reported as to be located by J. D. Kennedy of Cincinnati, Ohio; W. H. Gee, president; J. D. Kennedy, general manager.

Fort Smith—Lumber Company.—The Honsberger Lumber Co. has been incorporated, with capital stock of \$5000, by R. A. Honsberger (president), D. R. Stevens and H. C. Mayard.

Hackett City—Coal Company.—The Missouri & Arkansas Coal Co. has been incorporated, with capital stock of \$10,000, and W. L. Quinley is president.

Little Rock—Brewery.—F. Widman (architect) of St. Louis, Mo., is said to represent a St. Louis party who contemplates the erection of a brewery in Little Rock.

McGehee—Stave Company, etc.—Incorporated: The McGehee Trading & Stave Co., capital stock \$2000; Abner McGehee, president; James McGehee, secretary.

FLORIDA.

Apalachicola—Water-works.—The Apalachicola Water-Works Co. will construct system, and is now inviting bids on construction; J. T. Meginniss, engineer.*

Bartow—Flour Mill.—Brown & Carhart intend the erection of a flour mill of fifty barrels capacity daily.*

Brooksville—Telephone Lines.—L. B. Varn & Co. will extend telephone lines.*

Fort McCoy—Saw-mill.—Reports state that Georgia capitalists have purchased \$600,000 worth of pine timber lands near Fort McCoy from the Copley Log Co., and will erect a large saw-mill.

Magnolia Springs—Ice Factory, etc.—O. D. Seavy has contracted for an eight-ton ice machine for hotel refrigeration and a two-ton plant for ice-making.

Richmond—Kaolin Refinery, etc.—The Palatlakaha Company has obtained control of the Palatlakaha Kaolin Co., and is now erecting a plant for refining kaolin, capacity to be 1000 tons per month; company's main office is in Atlanta, Ga.

Tampa—Cold-storage Plant.—The Cudahy Packing Co. of Kansas City, Omaha and Sioux City is about to erect a cold-storage warehouse at Tampa.

GEORGIA.

Atlanta—Pottery.—C. & F. Terrell of Quincy, Ohio, have been in Atlanta investigating clay deposits near the city, with a view of utilizing same for the operation of a pottery.

Atlanta—Mercantile.—Incorporated: The J. M. High Co., capital stock \$125,000, for mercantile purposes, by J. M. High, F. W. Holt, George W. Culpepper and A. J. Johnson.

Augusta—Water-works.—The North Augusta Land Co. will construct a system of water supply at its suburban town.

Cartersville—Corn Mill.—The Cartersville Milling Co. has decided to add to its flour mill a corn-milling plant of 1000 bushels capacity daily.

Cochran—Barrel-hoop Factory.—William L. Poole, operating planing mill and variety works, announces he will add to his plant a factory to get out sawed wooden hoops for slack barrels.

Conyers—Paper Mill.—F. U. Bowles of Marietta, Ga., contemplates establishing paper mill at Conyers.

Dahlonega—Gold Mines, Mills, etc.—The Crown Mountain Gold Mining & Milling Co., recently reported as incorporated, etc., has decided to commence at once development of its property on an extensive scale. Contract will be awarded for the immediate erection of a 60-stamp mill and other equipment; Col. J. H. Moore, vice-president.

Gore—Flour Mill.—M. P. Dill & Co. contemplate the erection of a 40-barrel roller-process flour mill.*

Griffin—Knitting Mill.—J. D. Boyd and his associates, recently noted as forming knitting company, have organized and will build a \$20,000 plant for daily capacity of 100 dozen suits; machinery all purchased.

Kingston—Stone Quarries, etc.—The Clifford Lime & Stone Co. has been incorporated to furnish limestone and lime for building purposes. Sam P. Jones of Cartersville is president; George Aubrey, secretary, and W. R. Laramore, manager.

Macon—Lumber Mills.—E. L. Martin, P. D. Todd and A. E. Causey have applied for incorporation of the South Georgia Lumber Co., capital stock \$30,000, to build mills, etc.

Marietta—Ice Factory.—E. P. Dobbs and George F. Gober will build an ice factory; contract about arranged for.

Savanna—Cotton Mill.—N. H. Tilton of New Ham shire has purchased and will put in operation the Savannah Cotton Mills.

Savannah—Package Factory.—The Pierpont Manufacturing Co. of Crescent City, Fla., contemplates removing its package and box factory to Savannah.

Union Point—Cotton Mill.—The Union Manufacturing Co. has definitely decided upon the erection of the spinning mill recently reported, and has ordered machinery for it. The spindles will number 2400.

Washington—Knitting Mill.—R. A. Almand will build a knitting mill for hosiery and underwear.

KENTUCKY.

Clarkson—Flour Mill and Elevator.—Clarance Rogers will build flour mill, as reported recently; mill to have daily capacity of seventy-five barrels, with grain elevator attached, and cost about \$6500.

Louisville—Filter Factory.—The Dorn & Kitchings Manufacturing Co. of Carthage, Mo., contemplates locating a factory in Kentucky for producing its water filters.

Paducah—Ice and Cold-storage Plant.—Charles Smith has decided to add to his meat market a cold-storage and ice-making plant.

Paducah—Distilling.—The Early Times Distilling Co. has been incorporated, with capital stock of \$50,000 and J. H. Beam, president; H. W. Walters, vice-president, and Lawrence Dallam, secretary.

Paris—Ice Factory.—A company has been organized by Charles Noyes and others, with a capital of \$20,000, to erect and operate an ice factory.

LOUISIANA.

Henryville—Cotton Ginney.—John H. Henry will rebuild his burned cotton ginney.

New Orleans—Refrigerating Plant.—The Security Brewing Co. is preparing to equip its brewing plant with a 70-ton refrigerating machine, contract for which has been made.

New Orleans—Ice Factory.—The Independent Ice & Distilled Water Manufacturing Co. is preparing to enlarge plant by the addition of a 75-ton ice machine, absorption system; contract awarded.

New Orleans—Pipe-organ Factory.—Phillip Werlein, Limited, has purchased site and will erect a building 30x161 feet in size, to be fully equipped with complete equipment of machinery, etc., for the manufacture of church and pipe organs of all sizes.

Shreveport—Woolen Mill.—W. J. Williams of Glenwood, Mo., contemplates removing his woolen mill to Shreveport or some other Southern city.

MARYLAND.

Baltimore—Tea and Coffee Stores.—C. D. Kenny, Mrs. Frances F. Kenny, Patrick J. Kavanagh, Howard Bryant and others have incorporated the C. D. Kenny Co., with capital stock of \$100,000, to continue the conduct of the chain of tea and coffee stores established by C. D. Kenny.

Baltimore—Electric Company.—The Chesapeake Electric Co. has been incorporated for dealing in general electrical supplies, etc., by Benjamin C. Howard and Francis T.

Homer of Baltimore county, Eugene Greenway of Harford county and Alan M. Cohen and Jacob I. Cohen of Baltimore city; capital stock \$20,000.

Baltimore—Ice Factory.—The Independent Ice Co. is enlarging its 60-ton factory by an additional 100-ton ice-making machine and a 75-ton freezing system, for which contract has been let.

Baltimore—Bottling Plant.—Incorporated: The Reid Company, for manufacturing ginger ale and other carbonated beverages, by Samuel R. Tregallas, Hilary H. Reid, Leonard B. Nolley, Philip W. Truehart, James C. Green, John I. Pridgen and Charles M. Truehart. The capital stock is \$25,000.

Baltimore—Steel Plant.—It is reported that Henry C. Frick of Pittsburgh, Pa., is negotiating for the purchase of the plant of the Maryland Steel Co. at Sparrow's Point, the plan being to make at that point ship plates for the New York Shipbuilding Co. at Camden, N. J., and to continue the production of steel rails, chiefly for export. Rumors say \$7,500,000 will be paid for the plant and \$6,000,000 be spent for improvements. The Mellon family, bankers of Pittsburgh, are reported to be interested in the negotiations, which have not yet, it is said, been carried to a conclusion.

Embla Park and Tuxedo—Water-works.—Contract has been awarded to E. F. Kitson of Reading, Pa., for the construction of the proposed water-works that are to supply Tuxedo and Embla Park; work will begin March 1; cost will be \$24,000.*

Marion Station—Saw-mill, etc.—E. W. & L. S. McGrath of Salisbury, Md., have purchased timber lands near Marion Station and Fruitland, and will erect saw-mill for cutting timber.

Washington, D. C.—Engraving.—Incorporated: The Daniel Process Co., to sell patented process for producing engraved plates; capital, \$500,000; incorporators, J. E. Fitch, B. H. Warne, E. H. Daniel, J. L. Atkins and H. L. West.

Washington, D. C.—Ice Factory.—The American Security & Trust Co. is preparing to increase cold-storage capacity, and has contracted for a 20-ton refrigerating machine.

Washington, D. C.—Brick Works.—The Rosslyn Brick Co. has been formed, with F. Baker Weaver, president; George W. Wise, vice-president; E. R. Haight, secretary; E. P. Simpson, treasurer, and E. P. Dillman, general manager.

Washington, D. C.—Automobile Works.—Chartered: The American Autocarette Co., to manufacture, buy and sell automobiles and other vehicles. O. G. Staples is president; capital stock \$300,000.

MISSISSIPPI.

Bay St. Louis—Woodworking Factory.—Walter Weaver will build a woodworking factory.

Columbus—Cottonseed-oil Mill.—R. L. Lewis of Meridian, Miss., will erect in Columbus a 60-ton cottonseed-oil mill, not twenty tons, as reported recently.

Greenville—Barge Docks.—The Southern Railway Co. (Frank S. Gannon, general manager, Washington, D. C.) has small docks at Greenville for repairing coal barges, and will probably slightly extend them in the near future. (Reference made to this report lately under Greenville, Ala., by error.)

Laurel—Planing Mill.—The Kingston Lumber Co. will rebuild its planing mill recently burned. An electric-lighting plant will be installed also.

MISSOURI.

Dexter—Flour Mill.—The Sehr Milling Co. of 3137 Brantner Place, St. Louis, expects to build a 600-barrel flour mill at Dexter.

Joplin—Cold-storage Plant.—The Wm. J. Lemp Brewing Co. (of St. Louis) will equip with a 25-ton freezing tank its Joplin warehouse; contract awarded.

Joplin—Lead and Zinc Mines.—The Portland Mining Co., recently reported as incorporated, will develop lead and zinc mines near Joplin, erecting a 100-ton mill, etc.; L. W. English, president (address care of Brown Branch Continental Tobacco Co., St. Louis, Mo.)*

Kansas City—Tent Company.—Incorporated: The J. C. Baker Tent & Awning Co., capital stock \$10,000, by J. C. Baker, A. Lund, W. C. Frazer and others.

Kansas City—Oatmeal Company.—Incorpo-

rated: The Kansas City Oatmeal & Cereal Co., capital stock \$150,000, by Joseph Tolliver, George Peake and George L. Peake.

Kansas City—Woolen Mill.—The Glasgow Woolen Mills Co. has been incorporated, with capital stock of \$25,000, by D. J. Welch, J. C. Shepherd, C. L. Marsh and others.

Kirksville—Coal Company.—The Kirksville Coal & Construction Co. has been incorporated, with capital stock of \$40,000, by G. W. Rupe, S. M. Pickler, E. L. Hilbert and others.

Missouri—Lead and Zinc Mines.—Incorporated: The Cumberland Zinc & Lead Mining Co., by W. O. Hoffman, R. R. Henderson, Harry E. Weber, Lawrence A. Fletcher, Peter J. Seaver, Dewarren H. Reynolds and Will H. Shepherd, all of Cumberland, Md. The capital stock is \$16,000.

St. Louis—Rolling Mill.—Incorporated: The Ewald-Brown-Hicks Rolling Mill Co., capital stock \$75,000, by J. H. Ewald, Benjamin Brown, George B. Hicks, Jr., and others.

St. Louis—Manufacturing.—Incorporated: The Materne Manufacturing Co., capital stock \$40,000, by John P. Materne, Julius T. Rembauer and Reinhold H. Materne.

St. Louis—Ice Company.—Incorporated: The Washington Ice & Coal Co., capital stock \$12,000, by Edward R. Johnson, A. E. Kammerer and G. H. Schookemiller.

St. Louis—Laboratory.—Incorporated: The Heum-Hoeftken Laboratory Co., capital stock \$12,000, by Francis Heum, W. D. Hoeftken and Stephania Heum.

St. Louis—Dairy Company.—The Western Dairy Co. has been incorporated, with capital stock of \$25,000, by A. Robyn, William Klusmeier and William Lochmoeller.

St. Louis—Bed Company.—Incorporated: The American Bed Co., capital stock \$100,000, by Charles L. Plunkett, Charles R. Crouch and C. L. Miller.

St. Louis—Lighting Company.—The Guernsey Incandescent Lighting Co. has been incorporated, with capital stock of \$100,000, by D. W. Guernsey, Sam T. Price, J. G. Branch and C. W. Branch, Jr.

NORTH CAROLINA.

Biltmore—Ice Plant.—The Swannanoa Ice & Coal Co. is enlarging its ice plant, and will put in a 20-ton machine; contract awarded.

Brevard—Saw-mills.—The Brevard Lumber Co. will build several more saw-mills.*

Brevard—Water-works.—The Toxaway Co. contemplates building a water-works plant.*

Bryson City—Bridge.—It is contemplated to construct a wire foot bridge across the Tuckaseegee river. For information address J. H. Everett.*

Centerville—Cotton Gins, etc.—Incorporated: The Centerville Supply Co., for dealing in merchandise and ginning cotton. The capital stock is \$4500, and the incorporators are Augustus Wright, A. W. Alston, Jenie C. Alston and L. N. Williams.

Charlotte—Steam Laundry.—Leon, Grose & Moore (in Harty Building, West Trade street) will equip a steam laundry.

Charlotte—Cotton Mill.—It is rumored that R. M. Miller, Jr., will organize a company to build a cotton factory.

Charlotte—Cotton Factory.—The Ada Manufacturing Co. will put new machinery in its cotton factory.

Cherryville—Cotton Mill.—The Gaston Manufacturing Co. will double its equipment of 3400 spindles and 96 looms; machinery all bought.

Enfield—Cotton Factory.—Charter has been granted to the Enfield Cotton Mills, with capital stock placed at \$75,000 and privilege of increasing to \$300,000. Incorporators are Messrs. Thomas H. Battle, R. H. Hicks, Alex. P. Thorpe, L. Q. Tillery, James C. Braswell, A. M. Fairly and others; purpose, to build cotton mill.

Everitt—Lumber Company.—The Everitt Lumber Co. will increase its capital stock from \$25,000 to \$50,000.

Faison—Lumber Mills.—Andrew Glisson of Goldsboro, N. C., and his associates expect to commence the erection soon of the proposed big lumber mills near Faison.

Faith—Cotton Mill.—There is a movement on foot for the organization of a cotton-factory company. J. T. Wyatt can give information.

Goldsboro—Shingle Mill.—Griffin Shingle Co. has added more machinery to its mill.

Greensboro—Furniture Factory.—Incorporated: The Ridge Furniture Co., for the purpose of manufacturing furniture, by W. J. Ridge, C. O. Johnson and D. T. Dicks, with a capital of \$1800.

Greensboro—Bobbin and Shuttle Factory.—Charles B. Saxton of Greensboro, Walter H.

Bishop of Chicago, Ill., and E. R. Saxton of Buffalo, N. Y., have incorporated the Piedmont Shuttle and Bobbin Works, with capital stock of \$10,000.

Greensboro—Commission Company.—The Southern Import & Commission Co. has been incorporated to represent Southern and Eastern mills manufacturing rugs, carpets, matting, dry goods, etc., by E. P. Wharton, J. N. Leak, Alex. Alford and others. Capital stock is \$25,000.

High Point—Machine Works.—The High Point Machine Works will double the capacity of its foundry, erecting another building, etc.

High Point—Mantel and Table Factory.—The High Point Mantel & Table Co. has been incorporated for the manufacture of tables and mantels, capital stock to be \$12,000. Incorporators are E. M. Armfield, A. M. Rankin, T. O. Spencer, R. J. Bell, G. H. Keorus and others.

Kernersville—Woodworking Factory.—Lewis & Griffith have started a washboard factory.

Kinston—Mantel Factory.—The Kinston Mantel Co., reported last week as organized, has C. W. Blanchard, president; W. H. O'Berry, vice-president, and C. E. Lincoln, manager. Machinery has been purchased, and factory is now being equipped.

Lincolnton—Ice Factory.—John M. Motz intends erecting a 40-ton ice-making plant.*

Monroe—Cotton Factory.—It is rumored that W. C. Heath and others will form another cotton-factory company.

Rockwell—Flour Mill.—Rockwell Roller Mills have bought all the necessary machinery needed to entirely rebuild its mill that was burned recently.

Rocky Mount—Warehousing.—Incorporated: The Rocky Mount Storage Warehouse Co., by J. C. Braswell, J. D. Rose, W. L. Petty, J. O. W. Gravelly and A. P. Thorpe, to receive on deposit tobacco and other agricultural products, etc. The capital stock is \$25,000.

Salisbury—Granite Quarries.—F. N. May of Rochester, N. Y., has purchased and will develop granite quarries in Rowan county.

Shelby—Cottonseed-oil Mill.—J. D. Lineberger, J. P. Dellinger, Michael Plonk, J. J. McMurry and others have organized the Carolina Cottonseed Oil Co. to build an oil mill; capital stock is \$30,000.

Southport—Saw-mill.—A. J. Robbins has purchased and will operate the Wiswell saw-mill. New machinery will be put in.

Sutherlands—Mineral and Timber Developments.—The Zinns-Bach Mining & Lumber Co. has been incorporated by E. F. Zinns, Joseph Bock, J. A. Zinns and Edmund J. Bach, all of Milwaukee, Wis., for mining of minerals; also to build tramways, bridges, hotels and workshops, etc. The capital stock is \$25,000.

Tarboro—Cotton Mill.—The Fountain Cotton Mills will add 5000 spindles later on; now has 5350.

Tarboro—Manufacturing, etc.—Incorporated: The T. W. Thrash Co., for merchandising and manufacturing, by T. W. Thrash, Mrs. J. O. Thrash and J. M. Thrash.

Wilmington—Mercantile.—Incorporated: The Cooper & Cooper Co., capitalized at \$10,000, by P. S. Cooper, L. J. Cooper, Blanche Cooper and Lella M. Cooper.

Wilmington—Ice Factory.—The Carolina Ice Co. has contracted for enlarging its 18-ton ice machine to a capacity of about twenty-two tons daily.

Winston-Salem—Electric-power Plant.—The Fries Manufacturing & Power Co. is placing additional machinery in its electric-power plant, contracts for same having been placed.

SOUTH CAROLINA.

Bamberg—Oil Mill.—The Cotton Oil Mill of Bamberg has been incorporated, with capital stock of \$15,000, by F. M. Bamberg, E. R. Hays, Conrad Eberhardt, H. J. Brabbam, John F. Folk, H. C. Folk and Havelock Eaves. The capital stock is \$15,000.

Bennettsville—Cotton Mill.—The Bennettsville Manufacturing Co. will install 4000 additional spindles by May 1, giving the mill 15,000 in all.

Charleston—Ice Company.—Chartered: The Citizens' Ice Co., capital stock \$50,000, and R. M. Anderson, president; W. S. Anderson, secretary, and C. J. Micholoffsky, treasurer.

Charleston—Cotton Mill.—The Vesta Cotton Mills will put in considerable new machinery for the manufacture of finer grades of cloth.

Cheraw—Window-display Company.—The Interchangeable Display Window Co., capital stock \$100,000, has been incorporated by James J. Evans and A. E. Robins of Provi-

dence, R. L., and William P. Pollock of Cheraw. Company will manufacture, etc.

Cheraw—Cotton Mill.—Incorporated: The Cheraw Cotton Mills, capital stock \$100,000, by H. P. Duvall, H. W. Finlayson, A. L. Evans, R. M. McKay, W. R. Godfrey and others to build a cotton factory.

Chester—Bottling Works.—The Chester Bottling Co. has been incorporated to bottle soda waters, etc., by Thomas J. Martin, C. C. Edwards, J. L. Simmons, L. D. Childs, W. C. Bates, T. H. White and Samuel E. McFadden.

Columbia—Furniture Factory.—M. R. Cooper, F. S. Earle and John T. Gaston have incorporated the Gaston Milling & Manufacturing Co. to manufacture furniture, etc.; capital stock \$5000.

Florence—Railroad Shops, etc.—It is stated that the Atlantic Coast Line's improvements at Florence will be much more considerable and extensive than was at first proposed. Plans and specifications for new shops are now being drawn; the capacity of the present shops will be doubled by this addition; a coal elevator 75x300 feet will be built; there will also be a car-shed and the depot previously reported in the "Building Notes" department; John R. Kenly, general manager, Wilmington, N. C.

Gaffney—Flour Mill.—T. I. Walker and D. C. Phillips will build a flour mill of daily capacity for sixty-five barrels; contract awarded for machinery.

Sumter—Cotton Mill.—The Sumter Cotton Mills' stockholders have ordered the directors to inquire into the feasibility of erecting another 5000-spindle plant.

Williamston—Cotton Mill.—G. W. Sullivan, Jas. P. Gossett, G. H. Mahon, C. E. Horton, W. A. McKelvey and others will apply for charter for the Williamston Mill, with capital stock of \$250,000, to erect cotton factory.

TENNESSEE.

Bristol—Knitting Mill.—The Bristol Knitting Mills Co., capital \$100,000, has been organized, with Leopold Kaufman of Nashville, Tenn., as president, to establish a knitting plant; J. C. Byars of Bristol, secretary.

Bristol—Saw-mills, etc.—The Morton-Lewis-Wiley Lumber Co. has bought, it is stated, large tracts of timber land in Holston valley for \$32,000, and will build extensive mills for cutting lumber.

Brownsville—Telephone System.—The Progress Telephone Co. has obtained franchise to establish telephone system and commenced work.

Cookeville—Telephone Company.—Incorporated: The Cookeville Co-operative Telephone & Telegraph Co., capital stock \$5000, by O. C. Conatson, L. B. Pennock, John W. Wright, W. G. Pennock and J. W. Walter.

Elk Valley—Iron Mines.—Baird & Chandler have leased and will develop several tracts of iron-ore lands.

Elk Valley—Iron Furnace.—Negotiations are in progress for the construction of an iron furnace, the probabilities being for a definite conclusion of the deal. Probably C. R. Baird can give information.

Flourville—Telephone Company.—The Flourville Telephone Co. has been incorporated, with capital stock of \$2500.

Harriman—Brick Works.—It is stated that a Mr. French has purchased site and will establish brick works.

Harriman—Bedstead Factory.—The Harriman Metal Bedstead & Manufacturing Co. is building the factory lately reported, not Messrs. Gibson & Godbee, as was at first stated. The company has for its officers E. B. Godbee, president; L. Ephoram, vice-president and secretary; E. O. Hayman, treasurer and manager.

Knoxville—Coal Mines.—The Minersville Coal Co. has been granted a charter, capital stock \$50,000. The incorporators are B. A. Jenkins, Leon Jourolman, W. L. Welch, Henry Hudson and J. G. Johnson. Coal mines will be opened.

Memphis—Ice Factory.—The Oliver-Finnie Grocer Co. contemplates putting in a small ice factory.

Mt. Pleasant—Ice Factory.—The mayor is in correspondence with a Nashville party who contemplates building an ice factory in Mt. Pleasant.

Mt. Pleasant—Electric-light Plant.—E. L. Gregory, C. H. Ingram, H. D. Ruhm, J. G. Ingram and others have incorporated the Mt. Pleasant Electric Co., with capital stock of \$15,000.

Ooltewah—Saw-mill.—The Loomis & Hart Manufacturing Co. of Chattanooga will build a saw-mill at Ooltewah.

Pulaski—Water-works.—The Pulaski Water Co. has contracted for the sinking of an artesian well to increase its water supply.

South Pittsburg—Iron Foundry.—The Blacklock Foundry Co. will enlarge its plant by the erection of a new foundry.

Stonycreek—Mineral Developments.—It is reported that the Tennessee Mineral Co., with \$2,500,000 capital, has been incorporated to develop iron properties of Carter county, and that U. T. Fackenthal, the general manager, of Brooklyn, N. Y., is in Knoxville purchasing machinery and supplies and will at once begin developing the property and erect a concentrating plant costing \$500,000. It is reported also that the efforts of John N. Adams of Elizabethton, Tenn., enlisted the capital.

TEXAS.

Bay City—Irrigation and Rice Cultivation. Incorporated: The Matagorda County Rice & Irrigation Co., capital stock \$25,000, by Louis Huebner, Frank Huebner, D. P. Moore and others.

Beeville—Water-works.—C. N. Dunlop is about to commence work on the proposed electric-light plant in which he and associates are interested.

Colorado—Electric-light Plant.—Incorporated: The Colorado Electric Light Co., capital stock \$10,000, by Benjamin S. Vantuyt, Thomas B. Vantuyt and Robert M. Webb.

Commerce—Grain Mill.—Incorporated: The Commerce Milling & Grain Co., capital stock \$20,000, by P. A. Norris, W. B. D. Jennett, B. B. Thompson and others.

Corsicana—Creamery.—George T. Jester is in correspondence with a party who proposes the erection of a creamery in Corsicana. A stock company is contemplated.

Elgin—Water-works.—W. H. Rivers, R. B. Walling and others are promoting efforts for the construction of a water-supply system.

Fulshear—Ice Factory.—H. E. Thompson contemplates the erection of a five-ton ice-making plant.*

Greenville—Foundry and Machine Works. Incorporated: The Greenville Foundry and Machine Works, capital stock \$15,000, by J. F. Moudu, A. E. McGary and H. T. George.

Greenville—Books.—Incorporated: The Harrison Book Co., capital stock \$10,000, by E. W. Harrison, D. W. Harrison and J. B. Harrison.

Houston—Ice Factory.—It is reported that the Crystal Ice & Fuel Co. is to build a 75-ton ice-making plant on McKee street.

McKinney—Cotton Mill.—J. A. Barnett and associates will organize a \$100,000 cotton-factory company.

Millican—Stone Quarries.—Incorporated: The Lauderdale Stone Quarrying & Crushing Co., capital stock \$35,000, by J. W. Lauderdale, A. N. Lauderdale, T. H. Brooks and others.

San Antonio—Telephone System.—H. M. Aubrey, Frank Smith and Harry Dagberry of San Antonio, C. N. Haskell of Detroit, Mich., J. S. Bralley of Wauseon, Ohio, and others have obtained franchise for telephone system, and it is said will expend about \$25,000 to establish it.

San Antonio—Cannery.—E. G. Holden is interested in the proposed erection of a cannery.

Smithville—Ice Factory and Electric Plant.—G. Buescher's Sons will erect an ice factory and electric-lighting plant.

Temple—Lumber Company.—Incorporated: C. M. Campbell & Sons, capital stock \$100,000, by C. M. Campbell, W. C. Campbell, C. M. Campbell, Jr., and others.

Victoria—Mercantile.—Incorporated: The A. Goldman Grocery Co., capital stock \$10,000, by A. Goldman and Victor E. Goldman of Victoria, and James Hull of Houston.

Wolfe City—Flour Mill.—It is rumored that a \$20,000 flouring mill will be built. Possibly Mr. Seaman can inform.

VIRGINIA.

Berkley—Knitting Mill.—The Chesapeake Knitting Mills will erect an additional building, install more machinery and otherwise enlarge its plant.

Charlottesville—Cannery.—Herbert Wingfield and others contemplate the establishment of a cannery and preserving plant.*

Greenville—Iron Mines.—Y. P. Harvey and associates will open iron mines.

Lee County—Iron Lands.—J. E. Thompson of Winchester, Tenn., has bought for development a body of iron-ore lands in Lee county.

Luray—Water-works.—The town will hold an election to vote upon an issuance of \$30,000 bonds for the construction of the water-works recently mentioned. Address "Town Clerk."

Lynchburg—Gas Plant.—Chartered: The

Lynchburg Gas Co., capital stock \$300,000, by the following incorporators: Frederick H. Shelton, Richard D. Apperson, William F. North, Robert D. McCue and Charles M. Blackford. The company acquires the established plant, which will probably be enlarged and improved.

Newport News—Cotton Mill.—Boston (Mass.) parties have made a proposition for the location of a cotton-mill enterprise, capitalized at \$1,200,000. Collis P. Huntington of New York city is now considering the terms of the offer, which will most likely be accepted.

Newport News—Armor-plate Works.—A dispatch from Newport News says that there is no doubt but that Collis P. Huntington (of New York city) of the Newport News Shipbuilding & Dry-Dock Co. will build an armor-plate works. It is further stated that work on such a plant has been commenced.

Newport News—Real Estate.—Incorporated: The Newport News Real Estate & Investment Co., capital from \$25,000 to \$300,000, with A. C. Pike of the Hygeia Hotel, Old Point Comfort, president, and Ed. S. Lang of New York, vice-president.

Norfolk—Shipyards.—A bill has been introduced in the legislature granting rights for the construction and operation of shipyards and dry-dock at Norfolk. The enterprise is proposed by a syndicate of which Mottu, DeWitt & Co. are the representatives. Among those interested are Henry Seymour of the Merritt-Chapman Wrecking Co. of Exeter, Mass. If the privileges asked for are granted it is understood that from \$100,000 to \$300,000 will be invested in an initial plant.

Norfolk—Feed Company.—Chartered: The Norfolk Feed Co., to manufacture and deal in feed; the capital is to be \$10,000; C. W. Harrell, president; S. B. Harrell, secretary and treasurer, and Paul Harrell, manager.

Norfolk—Mercantile.—Incorporated: The Hough & Herbert Co., with a capital stock of \$10,000.

Overall—Stave Factory.—B. F. Borden of Toms Brook, Va., has commenced the erection of a stave factory at Overall.

Richmond—Paper Mill.—The Bedford Pulp & Paper Co. contemplates enlarging its mills to increase output.

Roanoke—Engine Works.—Chartered: The Niagara Hydraulic Engine Co., capitalized at \$25,000, to manufacture and sell hydraulic engines. Dr. Joseph S. Tipton is president, and H. E. Pugh, secretary and treasurer. The board of directors are the above-named and S. Hamilton Graves, E. B. Jacobs and W. J. Johnson.

Roanoke—Zinc Mines.—Thomas L. Woodruff, Hubert K. Adams, Jos. D. Ellis, James Pierpont and Conrad S. Grove of Philadelphia, Pa., will organize the Roanoke Zinc & Silver Mining Co. to develop zinc deposits near Roanoke.

Staunton—Acetylene-gas Plants.—Incorporated: The Acme Acetylene Gas Co., capital stock \$5000, to make gas, sell plants, etc.; J. Mason Miller, Jr., president; D. A. Bucher, vice-president; C. R. Caldwell, secretary and treasurer.

St. Paul—Saw-mill.—C. Bolce of Abingdon, Va., has purchased timber and will erect saw-mill of 30,000 feet capacity daily to cut lumber.

WEST VIRGINIA.

Charleston—Ice Factory.—The Southern Manufacturing & Construction Co. will build a 10-ton ice factory.*

Clarksburg—Gas and Oil Wells.—Incorporated: The West Fork Oil & Natural Gas Co. of Clarksburg, with an authorized capital of \$5,000,000, for the purpose of leasing land and developing oil and gas. The incorporators are John Koblegard, Jacob Koblegard, P. H. Koblegard, John L. Ruhl, J. I. Alexander, E. R. Davis, C. E. Pride, B. F. Robinson, C. W. Lynch and others.

Eagle—Coal Mining.—Incorporated: The Carver Bros. Co., to open coal mines; capital \$250,000; incorporators, J. Carver, E. Carver, J. Wehrke, C. L. Black, all of Charleston, W. Va.; W. A. Carver of Plymouth.

Reedy—Lumber Company.—The Reedy Boom & Lumber Co., capital \$10,000, has been incorporated by J. S. Brown, S. B. Seaman, G. J. Hamric, G. H. Chenoweth, all of Reedy, W. L. Rector of Sherman.

West Virginia—Portland Cement Works.—The Federal Cement Co., formed last week under West Virginia laws, capital stock \$5,000,000, was organized to manufacture Portland cement in Virginia and Tennessee. The company has acquired over 25,000 acres of valuable rock deposits in those States suitable for the manufacture of Portland cement, and intends to build factories. Names of interested parties not announced yet.

Wheeling—Telephone Line.—The Home Construction & Telephone Co. has been incorporated, capital \$200,000, by G. Hook, A. Paul, W. A. Wilson, H. S. Sands, W. T. Shaffer, all of Wheeling.

Wheeling—Pattern Works.—W. D. Brown of Pittsburg, Pa., has established the Wheeling Pattern Works.

Wheeling—Saw-mills.—It is reported that Luther Allen, A. C. Saunders and H. B. Nye have purchased immense tracts of timber land and will erect saw-mills to cut heavy timbers for building of lake vessels.

BURNED.

Daisy, Ga.—P. S. Cummings & Bros.' saw-mill; loss \$10,000.

Laurel, Miss.—Kingston Lumber Co.'s planing mill; loss \$15,000.

Lawrenceville, Ga.—T. L. Ambrose's hotel building; loss \$3500.

Little Rock, Ark.—Dickinson Arms Co.'s plant.

Little Rock, Ark.—North Little Rock ice and electric plant damaged by fire; loss \$3000.

Richmond, Va.—Armitage Manufacturing Co.'s plant.

St. Louis, Mo.—Union Foundry Co.'s plant damaged to extent of \$24,000.

BUILDING NOTES.

Albemarle, N. C.—Business Building.—O. D. King and T. S. Parker will erect a brick business block.

Augusta, Ga.—Hotel.—J. B. White has purchased 264x96-foot tract on which to build a hotel seven stories high to cost from \$200,000 to \$250,000 after plans, etc., by Bruce & Morgan.

Augusta, Ga.—Depot.—T. K. Scott, general manager of the Georgia Railroad, has ordered Lewis F. Goodrich, architect, to submit plans of proposed union depot; structure to be about 153x500 feet in dimension.

Baltimore, Md.—Hotel.—Herbert Thum will build a hotel and restaurant building.

Baltimore, Md.—Church.—Second Church of Christian Science will erect an edifice to cost \$15,000 to \$20,000. Address care of Lyceum Parlors, Charles street.

Brevard, N. C.—Hotel.—The Toxaway Co. has broken ground for the erection of the hotel mentioned last week. It will cost \$25,000 to \$30,000.

Cedartown, Ga.—Stores.—R. O. Pitts will erect a store building.

Chesapeake, Md.—Clubhouse.—The J. D. Allen Co. of Philadelphia, Pa., has prepared plans for the four-story clubhouse to be built by the Chesapeake Beach Improvement & Amusement Co.

Courtland, Ala.—Warehouse.—The Merchants' Bank will erect a warehouse.

Greensboro, N. C.—Warehouse.—R. A. Gray has let contract to J. C. Morris & Co. for the erection of a 32x100-foot warehouse.

Greenville, S. C.—Opera-house.—Henry M. Shumate will build an opera-house to cost about \$15,000. A Georgia architect is now preparing plans for structure to seat 1500, with 26x24-foot stage, etc.

Louisville, Ky.—Office Building.—The Louisville & Nashville Railroad Co. has let contract to Cook & Laurie of Montgomery, Ala., for the erection of an office building to cost about \$25,000.

Monroe, La.—Hotel.—Ernest Fudiekar will build a hotel at a cost of \$25,000.

Norfolk, Va.—Hotel.—Bids will soon be wanted on the erection of four-story 350x100-foot hotel building, after plans by Cassell & Cassell. Probably D. Loewenberg of the Norfolk & Sewells Point Railway can give information.

Norfolk, Va.—Hall.—It is proposed to build a hall building after plans by J. E. R. Carpenter.

Pensacola, Fla.—C. P. Parker of Indianapolis, Ind., represents parties who propose the erection of a six-story fireproof building 80x120 feet, to cost about \$200,000 and have two passenger elevators, freight elevator, steam heat, electric-lighting equipment, etc.

Pratt City, Ala.—Hall.—Contract for the erection of a Knights of Pythias building has been let to Tom Culpepper.

Rock Hill, S. C.—Office Building.—H. E. White has prepared plans and specifications for a store and office building, two stories high, 75x100 feet.

Shreveport, La.—Office Building.—The First National Bank, W. B. Jacobs, president, will erect a bank block.

Shreveport, La.—Hotel.—Saenger Bros. will open bids February 10 for the erection

of the hotel and store building lately reported, to be three stories high. Plans and specifications can be seen at office of the architect, Perry Bridges, Cooper Building.

Tampa, Fla.—Warehouses, Slips, etc.—The West Coast Stores Co. has expended \$20,000 for store-front properties to be used as the site of immense warehouses, slips and other facilities for handling rosin and turpentine, etc.

Wilson, N. C.—Sanitarium.—Drs. Moore & Anderson will open bids February 15 for the erection of a sanitarium after plans by Wm. P. Rose of Raleigh, N. C. Plans can be seen at doctors' offices or at architect's office.

RAILROAD CONSTRUCTION.

Railways.

Anderson, Texas.—It is reported that right of way has been secured and ties obtained for the Texas Northern Railroad, proposed between Stoneham and Anderson, Texas, a distance of twelve miles. F. B. Johnston of Anderson is president of the promoting company. The road will be a feeder of the Gulf, Colorado & Santa Fe system.

Apex, N. C.—It is stated that the Cape Fear & Northern Railroad Co. has determined during the present year to build a branch fourteen miles long in Harnett county, connecting with the Cape Fear & Northern at Cokesberry, and another branch from Varina to Fuquay Springs is proposed. J. C. Angier at Apex, N. C., is general manager.

Baltimore, Md.—It is announced that the Baltimore & Lehigh Railway Co. has determined to change the gauge of this road from narrow to standard, and to rebuild it with 70-pound rails. The distance to be rebuilt will be forty-three miles. John Wilson Brown at Baltimore is president of the company.

Benton, Ark.—The Saline County Bauxite & Granite Co. proposes building a road about two and one-half miles long in Saline county. Among those interested are R. S. Perry and J. Ernest Smith.

Bentonville, Ark.—The Arkansas & Oklahoma Railway Co. has begun the grading of its extension from Southwest City to Grand River, I. T. The extension will be about seventeen miles long. J. M. Bayless is president of the company at Bentonville.

Bramwell, W. Va.—It is stated that the Big Sandy & Cumberland Railroad Co., recently referred to in the Manufacturers' Record, will build a line thirty miles in length to a connection with the Norfolk & Western system. Isaac T. Mann of Bramwell is reported as interested.

Briceville, Tenn.—It is reported that a company has been formed to construct a railroad between Briceville and Minersville, and that contracts have been let.

Bristol, Tenn.—Work on the extensions of the Virginia & Southwestern Railroad has progressed as follows: Thirty-seven miles have been surveyed, while sixteen miles of track have been laid. It is expected to complete all of the extensions ready for operation by May 1. C. K. Mount at Elizabethton, Tenn., is superintending of construction.

Charleston, W. Va.—It is stated that arrangements are being made to construct the proposed extension of the Ohio & Little Kanawha Railroad to the West Virginia coal fields at once. Frank A. Durban of Zanesville, Ohio, is president of the company.

Chattanooga, Tenn.—It is reported that W. L. Albright, the principal promoter of the Missing Link Railroad, has interested capitalists of St. Paul, Minn., in this enterprise, and that a company will soon be formed to take up the construction work.

Chester, S. C.—It is reported that the officials of the Carolina & Northwestern Railway Co. state that the line is to be extended from Lenoir, N. C., to a connection with a line reaching the Tennessee coal fields, and that preliminary surveys have already been made. L. T. Nichols at Chester is general manager.

Denison, Texas.—It is reported that the Kansas Midland Railway Co. has determined to extend its line from Wichita, Kans., to Denison, a distance of 250 miles. It is at present in operation between Ellsworth and Wichita, a distance of 102 miles. A. L. Wolf of St. Louis is receiver of the company.

Dothan, Ala.—C. K. Lawrence, superintendent of construction of the railroad between Dothan and Elton, Ala., writes the Manufacturers' Record that contracts have been let covering the entire line, which will be about eighty miles in length. It is to be completed about July 1, and will be a branch of the Central of Georgia system.

Dothan, Ala.—It is announced that a contract has been let to Messrs. Hardaway, Jones & Co. to construct the Chattahoochee & Gulf Railroad between Columbia and Elton, Ala., by way of Dothan and Hartford. The estimated distance is eighty miles, of which thirty miles are to be graded immediately and ten miles of track laid. C. H. Lawrence at Dothan is one of the principal promoters.

Easton, Md.—It is reported that a company is being formed to operate a line of steamers on the Miles and Choptank rivers; also to construct an electric line from Easton to Miles river bridge, a distance of three miles. Hon. Thomas C. Platt of New York is reported as interested.

Eureka Springs, Ark.—It is reported that J. B. Colt & Co. of Clinton, Mo., have secured a contract on the line of the Eureka Springs Railroad between Eureka Springs and Harrison, Ark. About fifty miles will be built, including over one mile of tunnel work. John Scullin at St. Louis is president of the company.

Hagerstown, Md.—It is reported that the Philadelphia & Reading Railway Co. is surveying a line for a new road, which will extend through a portion of Western Maryland, to be built in case the Western Maryland Railway is sold. The route is by way of Williamsport, Md. H. K. Nichols at Philadelphia, Pa., is chief engineer.

Harriman, Tenn.—The Southern Railway Co. has determined to build about two miles of line in the vicinity of Harriman to avoid the tunnel on the Cincinnati Southern Railroad near that place. Bids are being received for the work by G. B. Nicholson at Cincinnati, Ohio, who is chief engineer.

Kansas City, Mo.—It is reported that a contract has been let for an extension of the St. Louis, Kansas City & Colorado Railroad to complete it to Kansas City. L. M. Fouts of Weatherford, Texas, is president of the company.

Lawrenceburg, Tenn.—The last report concerning the Tennessee & Alabama Mineral Railroad is that it will be constructed from Lawrenceburg to a point near Tusculum, Ala., a distance of thirty miles. R. M. Quigley & Co. of St. Louis, it is stated, have secured the contract. J. C. McLanahan is one of the principal promoters of the road.

Morgantown, W. Va.—Thus far five miles of the Central Railroad of West Virginia have been completed and ten miles graded. It is proposed to complete it between Morgantown and Belington, a distance of sixty-five miles. George C. Sturgiss is president of the company.

Norfolk, Va.—Work is about to be resumed upon the Norfolk & Sewell's Point Electric Railroad, and the announcement is made that it is to be completed immediately. The Tennis Construction Co. of Philadelphia is the contractor. A. Lowenberg of Norfolk is president of the railroad company.

Parsons, W. Va.—It is reported that work will probably be resumed on the Cheat River Railroad, projected between Parsons and Point Marion, Pa. The estimated length of the line is seventy-six miles. Hon. James M. Guffey of Pittsburgh has recently been elected president of the company.

Port Deposit, Md.—It is reported that John E. Russell of Wilmington, Del., and others are promoting an electric railroad from Wilmington to Port Deposit, a distance of thirty-five miles.

Portsmouth, Va.—A bill has been introduced into the Virginia legislature to incorporate the James River Railway Co. The proposed road is from Portsmouth to Smithfield. The company is also authorized by the bill to construct branches if desired. Gustavus Oper of Baltimore and John L. Watson of Portsmouth are reported as interested in the enterprise.

Rockville, Md.—The Chesapeake & Northern Railroad Co. has been formed to build from a point on Chesapeake bay to Rockville, Frederick and Emmitsburg, Md., to terminate at the State line. The estimated length of the road is ninety miles. Charles S. Howard and A. T. Marsh are among the promoters.

Wheeling, W. Va.—The plan to build a railroad between Wheeling and Uniontown, Pa., is being agitated by business men of Wheeling, also of Waynesburg, Pa. Among those interested are J. D. Iams and E. M. Sayers of Waynesburg, and G. A. Protzman of Pittsburgh.

Wheeling, W. Va.—J. M. Vance and L. E. Sands of Wheeling are interested in the Benwood & Wheeling Connecting Railroad Co., which has recently been incorporated with \$1,000,000 capital stock. It is understood that the road will be built to connect several of the systems now entering the suburbs of Wheeling.

Wilmington, N. C.—It is reported that a

charter may be secured by a company which proposes building a line between Wilmington and Southport, a distance of twenty-five miles. It is stated that the new company has no connection with the one which had surveys completed some time ago along a similar route.

Street Railways.

Baltimore, Md.—The Maryland Electric Railway Co. has asked for a franchise to build an electric line in the city and suburbs. Messrs. I. L. Straus and Arthur P. Gorman, Jr., are counsel for the company.

Chattanooga, Tenn.—The Chattanooga Rapid Transit Co. solicits bids for the construction of its electric line to St. Elmo, in the suburbs. The estimated distance is four and one-half miles. S. W. Divine is president of the company.

Columbia, S. C.—A. M. Guignard has secured the contract for the extensions of the Columbia Railway & Power Co.'s trolley system, including the portion of the line to be rebuilt. The contract covers about four miles.

Kansas City, Mo.—The Home Electric Railway Co., which is endeavoring to secure a franchise to build an electric line in the city and suburbs, includes Bernard Corrigan and Richard Gentry of Kansas City.

St. Louis, Mo.—The St. Louis County Transit Co. has secured a franchise to build an electric line in the suburbs. G. Philip Hoffmann of St. Louis is president of the company.

Washington, D. C.—The District commissioners have approved the plans of the Capital Traction Co. to build its proposed extensions in the city limits. D. S. Carl is engineer of the company.

Winston, N. C.—The extension to the street railroad in Winston will be about one and one-half miles, and a contract has been let to J. G. White & Co.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Air Compressor.—Terry & Tench Construction Co., 11 Broadway, New York city, wants air compressor of capacity about 150 feet, suitable for field riveting.

Alcohol Manufacture.—See "Wood-alcohol Plant."

Basket Machinery.—See "Woodworking Machinery."

Bathhouse Equipment.—Laurens Laundry Co., Laurens, S. C., wants prices on fixtures for bathhouse.

Boiler.—Virginia Bridge & Iron Co., Roanoke, Va., is in the market for a boiler.

Boiler.—L. W. English, president Portland Mining Co., care of Brown Branch Continental Tobacco Co., St. Louis, Mo., wants bids on a 100-horse-power boiler.

Boiler and Engine.—Graves County Water & Light Co., Mayfield, Ky., wants 18 or 20x42-inch R. H. second-hand Corliss engine; 200-horse-power second-hand water-tube boiler, 1200 to 1500-light alternator (16,000 alternations per minute), thirty-two feet of 3 15-16-inch shafting having four-ring ceiling bearings on 48-inch floor stands, second-hand air compressor to deliver about 500 cubic feet of fresh air per minute (Duplex of standard make or Norwalk).

Boiler Manufacturers.—Ranz-Lambrecht Stamping Tool & Manufacturing Co., St. Louis, Mo., wants to correspond with boiler manufacturers relative to arranging for water gauges tested to 3000 pounds pressure.

Boilers.—Chilhowie Lumber Co., Chilhowie, Va., is in the market for two 50-horse-power boilers for saw-mill, to be delivered April 15.

Boilers.—Spirittine Chemical Co., Wilmington, N. C., wants two 25-horse-power boilers.

Boilers and Engines.—Alpha Cotton Mills, Jonesville, S. C., J. J. Littlejohn, treasurer, will require one 16x42-inch Corliss engine, wheel 15-foot diameter, 36-inch face; two 100-horse-power return tubular boilers, designed

to carry 125 pounds working pressure, with smoke connections large enough to take in a third boiler of same size later; piping of boilers must be arranged so that a third boiler can be added later without any material change; one 400-horse-power boiler-feed pump; one 300-horse-power feed-water heater; two 125-horse-power injectors; pipes, valves and fittings necessary to erect the above-described machinery complete on purchaser's foundation. The above to be of first-class material. The tops of boilers, steam and hot-water pipes to be covered with approved non-conducting material. All property to be delivered f. o. b. and erected. In making proposals, there must be attached specifications of the engine, boilers, sizes and maker's name of the pump, heater and injectors. All pipings must be done in first-class manner, and according to latest modern practice. Usual rights reserved.

Boiler Specialties.—See "Condensers."

Bolts and Nuts.—G. M. Davis & Son, Palatka, Fla., want to correspond with manufacturers of bolts and nuts.

Bottling Plant.—Cuban Tonic Co., J. C. Wilson, president, Houston, Texas, will want to buy bottling plant.

Brick Machinery.—J. C. Pass, Roxboro, N. C., wants prices on brick machinery.

Bridge.—J. H. Everett, Bryson City, N. C., wants information concerning wire foot bridges, with a view of letting contract for one.

Broom Factory.—J. M. Blalock, Roxboro, N. C., wants prices on complete equipment for broom factory.

Broom Machinery.—W. K. Fagg, Christiansburg, Va., wants addresses of makers of broom-manufacturing machinery.

Building Material.—U. S. Engineer Office, 735 North Capitol street, Washington, D. C.—Separate sealed proposals for about 6300 tons structural steel, about 170 tons iron castings, from 400,000 to 1,400,000 enameled bricks, and about 400,000 square feet fireproof floor, ceiling and roof construction, including column and girder coverings, will be received until March 5, and then publicly opened. Information furnished on application to John Stephen Sewell, lieutenant, engineers.

Building Materials.—A. D. Holler, Rock Hill, S. C., wants catalogues of sash and doors.

Building Materials.—United Acetylene Companies, 709 E. Main street, Richmond, Va., will want during the year a number of portable houses 8x8x5 feet.

Cannery.—W. B. Austin, Rose Hill, N. C., wants to buy a canning outfit for vegetables.

Cannery, etc.—Herbert Wingfield, Charlottesville, Va., wants full information regarding cannery and preserving establishment, prices on equipment, etc.

Carousels.—Geo. C. Woodman, P. O. Box "D," Laredo, Texas, wants addresses of makers of merry-go-rounds or carousels.

Clothing Machinery.—Box 91, Laurens, S. C., wants prices on machinery for making pants, shirts and overalls.

Condensers.—Spirittine Chemical Co., Wilmington, N. C., wants four copper condensers.

Cooperage.—E. V. Zoeller, Tarboro, N. C., wants addresses of makers of oil-barrel staves in shook form, and heads.

Cotton-rope Machinery.—Ozark Gin & Milling Co., Ozark, Ala., wants prices on machinery for manufacture of cotton rope.

Crate Machinery.—See "Woodworking Machinery."

Crushing Machinery.—See "Ochre Machinery."

Dredging.—U. S. Engineer Office, 601 18th street, Washington, D. C.—Sealed proposals for dredging at Milford Haven, Va., will be received until February 12, and then publicly opened. Information furnished on application to Chas. J. Allen, lieutenant-colonel, engineers.

Electrical Machinery.—See "Boiler and Engine."

Electrical Specialties.—See "Lightning Rods."

Engine.—Tribune Publishing Co., Monroe, Ga., wants a new or second-hand kerosene engine of two horse-power to run printing presses.

Engine.—J. F. Hockenberry, East Waterford, Pa., wants to buy a second-hand portable engine of about ten horse-power.

Engines.—United Acetylene Companies, 709 E. Main street, Richmond, Va., will want during the year a large number of gas engines of small capacity.

Fencing.—M. G. McCook, Sparta, Ga., wants addresses of iron-fence makers.

Fertilizer Machinery.—Lyle Ice & Trading Co., Braidentown, Fla., wants prices on machinery for mixing and grinding fertilizers.

Filtering Machines.—Cuban Tonic Co., J. C. Wilson, president, Houston, Texas, will want to buy filtering machines.

Flour Mill.—W. B. Burns, Sumter, S. C., wants prices on flouring mill to consist of one pair of French burr stones, 48-inch scouring machine, bolting outfit, etc., for capacity of six to fifteen bushels.

Flour Mill.—M. P. Dill & Co., Gore, Ga., are in the market for complete 40-barrel roller process flour mill.

Flour Mill.—Brown & Carhart, Bartow, Fla., want estimates on cost of 50-barrel flour mill complete; want also plans of necessary building.

Gasoline Engine.—See "Engine."

Gasoline Gas Plant.—U. S. Indian Service, Washington, D. C.—Sealed proposals will be received until February 24 for furnishing and delivering the necessary material and labor required in the construction of a gasoline gas plant at the Kickapoo boarding school, Kickapoo reservation, Kansas, in accordance with plans and specifications, copies of which are on file in offices of Journal of Kansas City, Mo.; Builders and Traders' Exchange of Omaha, Neb.; U. S. Indian Warehouse, 235 Johnson street, Chicago, Ill.; U. S. Indian agent, Pottawatomie and Great Nemaha agency, Kansas, and the office of Indian affairs at Washington. For any additional information apply to W. A. Jones, commissioner.

Grinding Machinery.—W. P. D. Moross, 711 Cherry street, Chattanooga, Tenn., wants to correspond with makers of or dealers in grinding machinery.

Hardware.—See "Bolts and Nuts."

Ice Factory.—Southern Manufacturing & Construction Co., Charleston, W. Va., desires estimates on a 10-ton ice-making plant complete.

Ice Factory.—H. E. Thompson, Fulshear, Texas, wants estimates on a five-ton ice plant complete.

Ice Factory.—John M. Moitz, Lincolnton, N. C., wants to correspond with manufacturers relative to estimates on a 40-ton ice factory.

Ice Machinery.—W. H. Scott, Lacrosse, Va., wants to correspond with builders of ice and refrigerating machines.

Insulator Pins.—See "Woodworking Machinery."

Ironworking Machinery.—C. S. Peck, East Waterford, Pa., wants to buy second-hand turning lathe.

Kerosene Engine.—See "Gasoline Engine."

Lightning Rods.—John G. Buxton, Milo Centre, N. Y., wants to buy lightning rods and fixtures.

Lumber Mills.—John H. Williams, 634 Buncombe street, Greenville, S. C., wants to buy a saw-mill (52 or 54-inch saw with detachable teeth) to cut 15,000 to 30,000 feet daily; also shingle machine with capacity of 60,000 daily, lath machine with capacity daily of 30,000 to 40,000.

Machine Tool.—Dr. E. S. Lyndon, Athens, Ga., will need an engine lathe.

Marble Work.—M. G. McCook, Sparta, Ga., wants to correspond with workers in marble monuments.

Merry-go-rounds.—See "Carousels."

Ochre Machinery.—J. F. Hockenberry, East Waterford, Pa., wants prices on machinery to manufacture ochre, capacity six tons per ten hours.

Paving.—Proposals will be opened February 19 for certain paving work at Newport News, Va. Plans, specifications and proposal forms on file at office of city engineer, or at office of T. Chalkley Hatton, consulting engineer, Wilmington, Del.

Planing Mill.—See "Woodworking Machinery."

Power Transmission.—W. P. D. Moross, 711 Cherry street, Chattanooga, Tenn., wants to correspond with makers of and dealers in power-transmission machinery.

Quarrying Machinery.—W. P. D. Moross, 711 Cherry street, Chattanooga, Tenn., wants to correspond with makers of or dealers in quarrying machinery.

Railway Equipment.—Tallahala Lumber Co., Ellisville, Miss., will need about March 1 locomotive and three to four miles of rails for lumber road.

Saw-mill.—S. A. Hauser, Salem, N. C., wants to buy saw-mill outfit complete, with boiler and engine; second-hand will do.

Saw-mill.—E. P. Franklin, Leesville, La., is in the market for a small saw-mill.

Saw-mills.—Brevard Lumber Co., Brevard, N. C., wants one or two saw-mills.

Sewing Machines.—See "Clothing Machinery."

Sewing-machine Stands.—American Sealing Machine Co., 1524 F street N. W., Washington, D. C., is in the market for sewing-machine stands, also tables and drawers.

Shafting, etc.—See "Boiler and Engine."

Soda Fountain.—J. H. & J. L. Young, Box 2, Wise, Va., are in the market for second-hand soda fountain.

Stationery.—John O. Moore, Culverton, Ga., wants samples of bill and letter heads.

Steam-power Plant.—See "Boilers and Engines."

Tables.—See "Sewing-machine Stands."

Telephone Equipment.—L. B. Varn & Co., Brooksville, Fla., want to buy seven or eight miles of telephone wire, four instruments, etc.

Thermometer.—Geo. L. Smith, Cadiz, Ky., wants to buy a weather thermometer graduated by tenth degrees.

Water-works.—Appleton City Water & Power Co., Appleton City, Mo., will want bids for sinking of an artesian well for water supply.

Water-works.—Apalachicola Water-Works Co. is in the market for bids for complete system of water-works, in whole or part, including six and eight-inch well, boilers, pumps and tower pipes, etc. Information for plans, specifications, drawings, etc., should be addressed to J. T. Meginniss, chief engineer, Apalachicola, Fla.

Water-works Equipment.—Toxaway Co., Brevard, N. C., will probably want two miles of pipe, etc., for water-works.

Water-works.—Stuttgart Water & Electric Co., Stuttgart, Ark., will want all materials and machinery for water-works.

Well-drilling.—See "Water-works."

Well-drilling.—E. F. Kitson, Reading, Pa., wants bids on drilling two wells, each eight inches by eighty feet.

Wire Foot Bridges.—See "Bridge."

Wiring System.—F. A. Vanderlip, assistant secretary Treasury Department, Washington, D. C., will open proposals March 5 for the installation of a wiring system for United States building at Bristol, Tenn. Plans, etc., on view at office of supervising architect in Washington, and of superintendent construction at Bristol.

Wood-alcohol Plant.—Cadwallader Jones, Selma, Ala., wants information regarding the manufacture of wood alcohol, prices on complete equipment of machinery, etc.

Woodworking Machinery.—A. B. Webber, care of Spartanburg Machinery Co., Spartanburg, S. C., is in the market for pony planer, mortiser, etc.

Woodworking Machinery.—Wheeler & Co., Durham, N. C., want addresses of makers of machinery used for boring pumps, columns, etc.

Woodworking Machinery.—Winkler & Smith, Wilkesboro, N. C., want addresses of makers of machinery for making insulator and ship pins from locust wood.

Woodworking Machinery.—Lyle Ice & Trading Co., Braidentown, Fla., wants prices on machinery for manufacture of baskets and crates.

Woodworking Machinery.—Dr. E. S. Lyndon, Athens, Ga., wants diagonal planer, nine-inch molder, six-inch molder, engine lathe, blind wiper, combination saw, etc.

Woodworking Machinery.—J. C. Galbraith, Goodlettsville, Tenn., wants to buy (dealers' prices) shingle, heading, hoop and stave machine; second-hand preferred.

Woodworking Machinery.—The Soule Steam Feed Works, Meridian, Miss., is in the market for a wood-column boring machine.

Woodworking Machinery.—Twin City Mills, Bristol, Tenn., wants addresses of makers of insulator-pin machinery.

Woodworking Machinery.—Long & Carver, Roxboro, N. C., want prices on planer and matcher with six feed rolls seven inches diameter and fourteen inches long, to plane five inches thick and fourteen inches wide; resaw, 26-inch saw; band saw, with 30-inch wheel; rip saw table, with 12-inch saw; gig or scroll saw table; cut-off saw, with eight feet swing from overhead; 50 feet of two-and-one-eighth-inch shafting; boxes; four pulleys thirty inches diameter and 12-inch face; leather and rubber belting, etc.

Gastonia's Filter Plant.—The city of Gastonia, N. C., has placed contract with the New York Filter Manufacturing Co. for a complete filtration plant to purify the municipal supply of water. The New York Company's office is at 26 Cortlandt street, New York city, to which applicants for information may address correspondence.

TRADE NOTES.

Cypress Lumber Co.—The Cypress Lumber Co. of Boston, Mass. (mills at Apalachicola, Fla.), having outgrown its old offices, has removed to 153 Milk street, where it shall be pleased to receive all correspondence and customers in future.

To Light Cotton Mills.—Contract has been awarded for a 50-horse-power McEwen engine and a 500-light Thompson-Ryan dynamo for the McDonald Cotton Mills at Sylacauga, Ala. E. B. Tyler secured this contract, the dynamo and engine to be the make of the Ridgway Dynamo & Engine Co. of Ridgway, Pa., which company Mr. Tyler represents as Southern representative. Mr. Tyler's offices are in the Tulane Hotel at Nashville, Tenn.

Growing Popularity.—The growing popularity of acetylene machines for lighting purposes is one of the marked features of the times. The United Acetylene Companies of 709 E. Main street, Richmond, Va., are supplying largely this acetylene trade, and find their business rapidly increasing. The companies remark an especial demand for lighting machines for residences; also they have just closed contract to install a complete lighting plant in a Washington (D. C.) hotel.

Perforated Metals.—The use of perforated metals in machinery and other appliances of the mechanical world is constantly on the increase. The demand with Messrs. Charles Mundt & Sons of 88 Walker street, New York city, this year is already so large that preparations are now being made for doubling their extensive plant for the manufacture of perforated metals. The plant produces a line of these perforated metals for every and all purposes; centrifugal machine and filter press plates a specialty.

Anent Mechanical Draft.—An instructive illustration of the results attending the use of mechanical draft is presented in the experience of the Utica (Ill.) Portland Cement Co. The change was recently made from a chimney to a Sturtevant fan as a means of draft production. The company says: "We formerly used five boilers and had trouble to keep up steam with a good grade of coal. We now use four boilers, and coal costing us thirty-five cents per ton less, and have no trouble in keeping a good head of steam."

Foundry Business Offered.—It is not often that a complete foundry plant, doing a profitable business, is offered for sale. Such a plant is located at Texarkana, Texas, and its patronage is good during the entire year. The plant is suitable for building engines and for railroad work and general machine and foundry practice. The owner, Mr. A. De Marce, is desirous of disposing of the property, and solicits correspondence from probable purchasers. Disability and old age are the factors that have decided Mr. De Marce to sell the plant.

Hancock Inspirators.—The Hancock Inspirator Co. manufactures the "Hancock" inspirator, the "Loftus" automatic injector, ejectors and general jet apparatus, and has moved its general office and salesrooms from Boston, Mass., to 85-87-89 Liberty street, New York city. The company requests that in future all correspondence, orders and remittances be addressed to its new location, as this will insure prompt reply and greatly facilitate the quick filling of orders. The "Hancock" inspirator and other goods enjoy an enviable reputation among steam-users generally, and are of a universally high standard.

Ice-making Machinery Contracts.—Each month the regular demand for ice-making and refrigerating machines constitutes an important factor in the business of the A. H. Barber Manufacturing Co. of 229 Water street, Chicago. The company's most recent contracts included a five-ton refrigerating machine for creamery in Iowa, 14-ton ice plant in Kansas, 16-ton ice machine in Illinois, eight-ton refrigerating and two-ton ice-making plant in Florida, seven-ton hotel refrigerating machine and one-ton ice factory in Indiana, 12-ton ice plant in Indiana, 20-ton machine for plate ice-making plant in Texas, six-ton machine for refrigerating in a Wisconsin creamery.

Electric Refrigerating System.—The Electric Axle, Light & Power Co. has recently been making an elaborate test of a car fitted with its electric refrigerating system. The car was sent through a portion of the South, and in a letter to the Manufacturers' Record the general agent of the company writes that the tests were a complete success, according to the statements of experts who made an investigation. A temperature, it is claimed, can be maintained by the use of

the electric current which will keep the contents of a car fitted with the company's device at the freezing point if desired. The current is generated from the axles underneath the car, and can also be used for illumination purposes if desired.

Aluminum Paints, etc.—The Frank S. De Ronde Co. of 54 John street, New York city, continues to find a large demand for its various specialties. The company is also headquarters for the celebrated Lustragen gold and aluminum paints for inside and outside use. These paints are of the highest order, give a lustrous surface, are untarnishable, durable and possess great covering capacity. The surface resists severe exposure to the weather and rough usage, and is especially adapted for use on boats, dynamos, cylinder heads, chains, anchors, metal masts and all other kinds of metal work that are exposed to the weather, whether overhead or submerged. Further details and prices may be obtained on application.

E. C. Atkins & Co. at Atlanta.—Attention is called to the removal of this company's branch house from Chattanooga, Tenn., where it was located for ten years, to Atlanta, Ga., at which place there will be better facilities to meet the needs and requirements of the fast-increasing business in the Southeast. E. C. Atkins & Co. (home office in Indianapolis) will carry a large and complete stock of their solid and inserted tooth circular, wide and narrow band, mill, cross-cut, hand, wood and other saws, together with a suitable line of mill supplies, such as files, emery wheels, lumbering tools, etc. In connection with this branch will be a fully-equipped saw-repair shop under the charge of competent workmen. In moving the branch to Atlanta, Ga., the company succeeds to the business of the Atlanta Saw & Supply Co., and Mr. F. X. Ohlen, who was at the head of the latter company, will look after the sales department of the new branch. Messrs. E. C. Atkins & Co. thank their patrons for the support that was given the Chattanooga branch, and hope to merit a continuance of business in the new location.

A Few Facts for Factory Folks.—Cleanliness and light are important features of a well-regulated factory. To secure these it is customary to whiten the interior of the building with whitewash or paint. Although far from satisfactory, whitewash is generally used, because it is less expensive than paint. "Muresco" is much superior and costs no more, considering results. This has been proven in some of the largest plants in the country. "Muresco" is a dry powdered preparation to be mixed with boiling water and applied with a brush. It is extremely durable; it will stay where it is put and not peel, flake or rub off. This is very important to manufacturers, as valuable machinery and materials are often damaged by the flaking and peeling of whitewash and other inferior finishes which do not contain proper binding material. "Muresco" is non-combustible, and will act as a retardant of fire when applied to wood—a fact recognized by insurance men. It will produce excellent results on smoked and stained surfaces, as well as on blackened and charred woodwork which has been damaged by fire, and will not turn yellow with age. For other interesting facts concerning "Muresco" address the Messrs. Benjamin Moore & Co., sole manufacturers, 244 Water street, Brooklyn, N. Y.

Fuel Economizers.—The Green Fuel Economizer Co. of Matteawan, N. Y., has established an office in the South and selected Atlanta, Ga., as the headquarters of its representatives. This company has already installed in the countries of Europe, South Africa and the United States the "Economizer" in connection with 150,000 boilers, representing over 3,000,000 horse-power. The "Economizer" consists of a system of cast-iron tubes about four inches in diameter and nine feet in length, made in sections of various widths and readily adapted to the requirements of all steam-users. The "Economizer" is essentially a feed-water heater, but it also answers the purpose of supplying a constant and continuous volume of hot water to the boiler, and by the high temperature of the water entering the boiler protects it from the wear caused by undue expansion and contraction caused by the changing of temperature of water which is being converted into steam by the ordinary powers. The "Economizer" utilizes the waste gases from the furnace and heats the water to from 220 to 250 degrees Fahrenheit. The Atlanta representative is Mr. G. M. Wells, known as being connected with several of the mechanical industries of the South, and particularly with the phosphate-mining interests of South Carolina and Flor-

ida, and has lived in the South many years and has an extensive acquaintance with Southern people. His offices are located in the Prudential Building. The Green Company is now erecting its "Economizers" in a number of Southern cotton mills.

TRADE LITERATURE.

Important Telephone Information.—Part 2 of "The Ericsson Series" has been issued by the Ericsson Telephone Co. of 296 Broadway, New York city. This series contains much important information relating to telephones.

New Saw Gummer.—The latest product of the Michigan Iron Works at Grand Rapids is the Champion saw gummer. This device is fully referred to and illustrated in a leaflet issued by the company. Every user of saw gummers and those likely to use them should peruse a copy of the leaflet.

Railway Water Service.—The supply of water is always a point of importance. To railways more especially is the present booklet directed, being devoted to a few specialties for railway water service as manufactured, built and supplied by the United States Wind Engine & Pump Co. of Batavia, Ill. Everything pertaining to the complete equipment of a railroad water station is supplied by the company.

Standard Tools.—The line of Standard tools in use in the steel and iron plants throughout the country is shown in the catalogue just issued. The Standard Tool Co. of Cleveland, Ohio, manufactures twist drills, reamers, chucks, spring cutters, taps, flat-spring and riveted keys, milling cutters, special tools, etc. The new catalogue cancels all previous editions, and both present and prospective users of tools in this class should have a copy on hand for reference.

Scientific Preserver of Food.—A refrigerator is a household necessity, and in its purchase one should be careful to buy only that which meets all the requirements of economy and hygiene. To keep food fresh and uncontaminated is essential to the life and health of the family not only in summer, but in winter as well. The "Odorless" refrigerator, which is claimed to embody all the desirable features of such an article, is fully described and illustrated in the catalogue issued by its manufacturer, the Keyser Manufacturing Co. of Chattanooga, Tenn. Copies on application.

Stone-Planing Machines.—Progressive stoneworkers are presumably on the lookout for new and improved machinery pertaining to their business, and for this reason we direct attention to the leaflet that has been issued by the Lincoln Iron Works of Rutland, Vt. This company's 1900 planers embody the highest efficiency with the greatest convenience of operation and maximum durability. They are the result of many years' experience in the construction of stoneworking machinery. Quarriers and others handling or otherwise treating stone, etc., will find these Lincoln leaflets of interest.

Electric-Power.—The growth in the use of electric-power goes steadily on. Having long ago passed the primary and experimental stages, it is rapidly supplanting many other forms of driving machinery. Constantly is there being witnessed the inception of new plans involving the use of electric-power at the completion of some installation to supersede the direct use of steam or put in new plants where a few years ago steam would have been the power plant. Anent this progress of electric-power in machinery-using establishments there will be found of much interest the latest publication of the Sprague Electric Co. of 527 W. Thirty-fourth street, New York city. This publication is "Electric-Power" (catalogue No. 58), copies of which may be obtained on application.

For the Vest Pocket.—A vest-pocket book for memorandum and general information purposes has been issued by the Charles Warner Co. of Wilmington, Del. This company's line of offerings includes foreign and domestic cements, Nazareth Portland cement, anthracite and bituminous coal, terra-cotta pipe, coke, lime, carbonate, magnesite, stone, sand, etc. The booklet contains much interesting information anent the company's goods, besides some general information that is handy for a business man to be acquainted with, such as the documentary stamp tax, postal regulations, the 1900 calendar, etc. The Charles Warner Co. has New York offices at 66 Maiden Lane and Philadelphia offices in the Land Title Building, at which it will be pleased to confer with contractors regarding supplying any or all of its line of goods.

For All Uses of Compressed Air Power.—The introduction of compressed air for various purposes in the industrial world continues. As the efficiencies and satisfactory results attained with compressed air power become known, so does the increased usage of devices in that class become a marked feature of industrial news. A catalogue issued by the New York Air Compressor Co. of 120 Liberty street, New York city, presents the company's machines designed for all uses of compressed air power. It contains illustrations and descriptions of air compressors actuated by steam, gas, gasoline, belt power or flywheel, etc., together with many hints of value to users of compressed air power. The catalogue also embodies some tables of especial interest. Copies of present catalogue on application. A later and more elaborate volume is now in preparation.

Encyclopedia of the American Well Works. The encyclopedia for 1900 issued by the American Well Works of Aurora, Ill., is most complete of its character. Present and possible future users of the line of machinery in reference are commended to give the book their careful consideration. The illustrations, prices and descriptions given include such apparatus in regular demand as well-sinking, prospecting, pumping, irrigating and hoisting machinery, water hoists, Chapman's air water-lifting systems, gasoline, gas and steam engines, boilers, etc., all of the American Well Works' manufacture. The company's Chicago offices are at 45 W. Randolph street, and another branch is in Dallas, Texas. Established in 1868, the American Well Works has been inventor and a leader in its line of machinery for twenty years, and offers its services in the full confidence that it can give satisfaction to the most exacting.

Refrigeration for Public and Private Establishments.—Refrigeration is one of many factors that enter into modern life. Both in public and private establishments cooling-rooms are used for the preservation of meats and other foods that otherwise would spoil. The McCray patent system of refrigeration has met with wide success in meat markets, packing-houses, hotels, public institutions and in residential buildings, and the manufacturer of it claims many exceptional merits that are found in no other device of its class. The McCray Refrigerator & Cold Storage Co. of Kendallville, Ind., is the owner and manufacturer of the McCray system mentioned, and is prepared to enter into contract for the placing of refrigerators of any and all kinds, large or small. Catalogues Nos. 35 and 50 of the company will be found of interest, dealing, as they do, with refrigerators for grocers and meat-sellers, and refrigerators for family use.

For Dealers Only.—To the trade: Messrs. Benjamin Moore & Co. wish to say that in drawing your attention to their catalogue it is desired to state that all goods manufactured by them are exactly as represented, those which bear their name being the best it is possible to produce. The firm makes this claim, and stands ready always to substantiate it. Their plants are being constantly improved and enlarged, and the trade can rest assured that the reputation for promptness in execution of orders, fairness in dealings and the high standard of quality of all their productions which have been the chief characteristics of this business will always remain so. Messrs. Benjamin Moore & Co. are of 244 Water street, Brooklyn, N. Y., and their colors in oil, japan and distemper, paints of all kinds ready for use, "Muresco," varnishes, wood stains, fillers, etc., are well known. Moore & Co.'s 1900 catalogue is intended for dealers only.

The Control of Heat.—The want of an accurate, reliable and durable instrument for measuring high temperatures has long been felt, not only by scientists, engineers and metallurgists, but also by manufacturers, the quality, quantity and economical production of whose products depends on closely regulated, as well as high temperatures. A device that is aimed to supply this want is the pneumatic pyrometer. This has been in actual practice in different branches of manufacture since 1894, and is therefore not in its experimental state. Messrs. Uehling, Steibart & Co., Limited, of Carlstadt, N. J., manufacture this pyrometer, and they have issued a book which explains in detail by means of both letter press and illustration the principles upon which it operates. The firm's representations and claims are founded, it says, not upon their own experience and beliefs, but upon the opinions of the most successful manufacturers of the country who have used the instrument and demonstrated its value. Those desiring fur-

ther information may address the firm for book.

Linde Ice Machine.—In a new catalogue, just issued, it is the purpose to give succinctly a few general matters of interest concerning mechanical refrigeration, and particularly a clear and concise description of the Linde ice and refrigerating machine and system. Prospective builders of ice factories or refrigerating plants, or who will install apparatus in buildings of any sort, are frequently at a loss to know just how to decide as to their machinery, and low prices frequently appeal to them. But it is best not to lose sight of the quality of the machinery and its serviceability. The duty constantly required of a machine in this class is of the utmost importance, and direct and most appreciable loss is the result of an inefficient apparatus. Linde ice machines are in use throughout the world, and have earned a reputation for efficiency that is not excelled by any other in its class. The Fred W. Wolf Co. of Chicago is the manufacturer of the Linde machines, and is ready to act as engineer and architect for complete plants, submit estimates, etc. Book on request.

Bangor Roofing Slate.—The building trades are familiar with the superior quality of the genuine Bangor roofing slate, but to familiarize the trades, architects and other interested parties more thoroughly with the product a souvenir book has been issued. The processes of manufacture are thoroughly described and illustrated, the workings of the industry being presented in such a way that they cannot but be interesting and of value to users. The slate comes from Northampton county, Pennsylvania, a region that has been acknowledged to produce the highest grade of black roofing slate, and in the very center of the celebrated vein is located the mines of the Bangor Excelsior Slate Co., its quarries being at Bangor, Pa., and its offices at Easton, Pa. The Bangor Excelsior Slate Co.'s trade-mark is the celebrated "Bangor Excelsior Slate" on a red shield. Copies of the book herein referred to may be had on application. Regarding the company's book, it may be said that it is of the highest possible grade in the printer's art, both in letterpress and in the illustrations, which are photographic reproductions.

Ice and Refrigerating Machines.—An illustrated catalogue has been issued by the Henry Vogt Machine Co. of Louisville, Ky. The book is cloth bound, with letter press of merit and many illustrations that accurately convey ideas of the machinery treated of. The company does not aim to give a scientific treatise on the subject of mechanical refrigeration, but merely information regarding its absorption ice and refrigerating machines. An experience of twelve years has enabled this company to produce a line of machinery in the class in question that has brought to it many orders for plants of the largest size from some of the most important manufacturing and other establishments in the country. The company's absorption system has been demonstrated to be a most efficient one for the purposes that it is intended for, and its rapidly-increasing business attests this strongly. The Henry Vogt Machine Co. has one of the largest and best plants of the kind in the country, and is prepared to contract for machines of any capacity for cold-storage depots, packing-houses, breweries, ice factories, etc.

Railway and Mill Supplies.—Heavy hardware, mill, manufacturers' and railway supplies and mechanics' tools constitute a major portion of the supplies that are in constant demand. In the Southern States this demand exists and is increasing daily, and houses have been established to meet this demand in so far as it is possible to do so. In the Southwest that section and its tributaries can be best supplied by the firm of Messrs. F. W. Heitmann & Co. of Houston, Texas. Heitmann & Co. make a specialty of the heavy hardware, machinery and supply business, and claim to carry the largest stock of goods of any wholesale house in the South. A catalogue of these goods bears out the firm's claim to the utmost, its completeness, the multitude of articles shown by illustrations and referred to being most thorough. This catalogue is of nearly 450 pages, bound in cloth, has alphabetical index, instructions for ordering goods, etc., and was prepared after compilation of a year. F. W. Heitmann established the business of the house here mentioned, and since his death last year it has been continued by his son, Mr. F. A. Heitmann. The large line of goods shown in the catalogue is all carried in stock and ready for prompt shipment. Those meaning business should have a copy of this book in their offices.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters. Items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Alabama Coal & Iron.

[New York Journal of Commerce.]

The following statement is official:

The Alabama Consolidated Coal & Iron Co., which on the 1st inst. paid a quarterly dividend of 1 1/4 per cent. on its preferred stock, has two furnaces in full blast, the earnings from which, in addition to dividends on the preferred, are in excess of 20 per cent. upon the common stock. A third furnace at Ironaton will go into blast early in March. The company's mines at Brookwood and Milldale produce the highest grade coal and coke in Alabama. Owning properties which yield both red and brown ore in abundance, lime rock, and an ample supply of coke convenient to its furnaces, the income of the company is well assured.

The Alabama Company was organized under the laws of New Jersey in July, 1899, with \$2,500,000 of preferred and \$2,500,000 of common stock. Mr. T. G. Bush of Alabama is president, and Mr. John E. Searles, vice-president and treasurer. The board of directors includes Hon. Abram S. Hewitt and Gen. Samuel Thomas. The company owns 70,000 acres of land near Birmingham, of which more than 5000 acres contain iron ore. Its coal properties include the 32,000 acres of land formerly owned by the Standard Coal Co. Experts estimate that from 18,000 to 24,000 acres are underlain with coal aggregating for the three upper workable seams from 150,000,000 to 200,000,000 tons. The possession of this coal insures to the company an unfailing supply of coke, the scarcity of which just now is a source of so much embarrassment to the owners of furnaces who obtain their coke in the open market. The company, in addition to its sales of coal and output of coke, is steadily increasing its coke ovens, and will be independent of all outside sources for its coke, limestone and ore.

New Corporations.

The business men of Winona, Miss., are forming a loan association, to be capitalized at \$50,000.

The Home Insurance Co. of Fordyce, Ark., has been formed and capitalized at \$100,000. J. E. Hampton is president.

E. B. Chandler and others are interested in the Chandler Loan & Trust Co., recently organized at San Antonio, Texas, with \$50,000 capital stock.

The Arkansas State Farmers' Insurance Co. has been incorporated by H. P. Hudgins, James Jackson and others, with offices at Texarkana, Ark.

James Robertson has been elected president, and J. R. Hanahan, vice-president, of the Realty Loan & Investment Co., recently organized at Charleston, S. C.

D. H. King has been elected president, R. C. Click, vice-president, and L. W. Pegram, cashier, of the Piedmont Savings Bank, recently opened at Winston, N. C.

The Newport News Investment Co. has been chartered, with A. C. Pike as president. The directors include S. Gordon Cummings and John Rowe of Hampton, Virginia.

New Securities.

The town of Salem, Va., has asked for legislative authority to issue refunding bonds. The mayor may be addressed.

W. J. Dickey of Augusta, Ga., has purchased

the issue of \$50,000 in bonds of Waycross, Ga., at a premium of \$4335.

The Farmers and Merchants' Bank of Columbia, Tenn., has decided to increase its capital stock from \$30,000 to \$50,000.

The Mississippi legislature is considering a bill authorizing the town of Aberdeen to issue bonds for refunding purposes.

Messrs. Feder, Holzman & Co. of Cincinnati have purchased the issue of \$140,000 in 4 per cent. bonds of Portsmouth, Va., at 100.625.

The Atlanta Standard Telephone Co. has given a mortgage for \$600,000 to the City Trust Co. of Philadelphia to secure a bond issue at 5 per cent.

Colquitt county, Georgia, will receive bids for an issue of \$25,000 in bonds. The board of county commissioners may be addressed at Moultrie, Ga.

The Nashville Railway Co. has filed a deed of trust to the Baltimore Trust & Guarantee Co. to secure an issue of \$6,500,000 in 5 per cent. bonds.

A bill is pending in the Virginia legislature authorizing Nansemond county to issue \$10,000 in bonds. The board of commissioners may be addressed.

The legislature has authorized Norfolk county, Virginia, to issue bonds for various purposes. The board of commissioners may be addressed at Norfolk, Va.

The town of Tarboro, N. C., will receive proposals until February 22 for its issue of \$10,000 in 5 per cent. bonds for improvements. John A. Weddell may be addressed.

A bill is pending in the South Carolina legislature authorizing Spartanburg county to issue \$50,000 in bonds. The board of commissioners may be addressed at Spartanburg.

Dividends and Interest.

The Union Road Co. of Savannah, Ga., has declared a dividend of 2 per cent.

The Bank of Wesson, Miss., has earned a dividend of 18 per cent. during the past year.

The Maryland Life Insurance Co. of Baltimore has declared a dividend of \$1.20 a share.

The Eatonton Compress Co. of Eatonton, Ga., has declared an annual dividend of 4 per cent.

The Fidelity Trust & Vault Co. of Louisville, Ky., has declared a quarterly dividend of 2 per cent.

The Ada Manufacturing Co. of Charlotte, N. C., has declared a semi-annual dividend of 3 per cent.

The dividend recently declared by the Louisville & Nashville Railroad Co. of 2 per cent. will be paid February 10.

Financial Notes.

The Old Dominion Loan Association of Richmond is considering a change in its charter, giving it the powers of a trust company.

The Chattanooga National Bank of Chattanooga, Tenn., has decided to decrease its capital stock from \$300,000 to \$200,000.

It is officially estimated that the taxes paid by the railroads to the States, counties and municipalities of Tennessee in 1899 aggregated nearly \$1,000,000.

Personally-Conducted Tours via Pennsylvania Railroad—Season of 1899-1900.

The Pennsylvania Railroad Co. announces the following personally-conducted tours for the season of 1899 and 1900:

Mexico and California.—A 45-day tour will leave Baltimore February 13. Fourteen days will be spent in Mexico and eighteen in California. The party will travel over the entire route by the "Mexico and California Special," the finest train that crosses the continent.

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Florida.—Four tours to Jacksonville will leave Baltimore January 23, February 6 and 20 and March 6. The first three of these admit of a sojourn of two weeks in the "Flowery State." Tickets for the fourth tour will be good to return by regular trains until May 31, 1900.	
Tickets for the above tours will be sold from all principal points on the Pennsylvania Railroad. For detailed itineraries, giving rates and full information, address B. Courlander, Jr., passenger agent Baltimore district, Baltimore, or Geo. W. Boyd, assistant general passenger agent, Philadelphia.	